

JUNE

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1904

The CHAUTAUQUAN



*A Magazine of
Things Worth While*

RAILROAD-CIVICS NUMBER

RAILROAD TRADE JOURNALISM
EVOLUTION OF THE AMERICAN RAILROAD
RAILROAD ODDITIES
RAILROAD TEMPERANCE REGULATIONS
THE TZAR OF THE SLEEPING CAR
SOCIAL CENTERS FOR RAILROAD MEN
THE RAILROAD BRANCH OF THE Y. M. C. A.
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CIVIC CHRONICLE FOR 1903 AND 1904

THE CHAUTAUQUAN

A Monthly Magazine of Things Worth While

Official Publication of Chautauqua Institution

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THE HISTORY OF THE





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of Iowa.



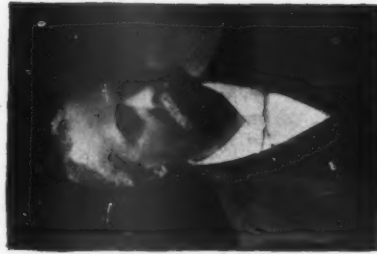
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THE INTERSTATE COMMERCE COMMISSION

THE CHAUTAUQUAN

VOL. XXXIX

JUNE, 1904

No. 4

Highway & Byway



WHAT is the political situation on the eve of the national campaign of 1904? Congress has adjourned, many states have held their conventions, adopted platforms and "indorsed" presidential candidates, and the issues should be tolerably clear. The actual facts are not in conflict with this conclusion. The issues are quite clear, nor is there much doubt as to the presidential selections of the two great parties.

Dealing with the Republicans first, it is generally recognized that President Roosevelt will be the nominee and standard-bearer of his party. Since the death of Senator Hanna the opposition to the president's candidacy has steadily declined, and it is now practically certain that no other name will be presented to the Republican national convention. It is understood that "Wall street" is still unreconciled and disaffected but the chiefs of the dominant party take the position that, alike in the coal strike case and in that of the railway merger, Mr. Roosevelt did no more than his duty and acted in the interest of the country as a whole. The platform will unquestionably approve the president's domestic and foreign policies and appeal to the people to elect him "on his record" and to preserve the conditions that have prevailed in the country since 1896. Thus on the Republican side the situation has been reduced to definiteness, simplicity and virtual certainty.

On the Democratic side there is more room for interesting and unforeseen developments. Not only are there several candidates for the nomination but the party is still "divided against itself" and the struggle between the radicals and the so-called

"reorganizers" is as severe and sharp as ever. It is true that the conservatives have won several notable victories and all indications point to their ascendancy in the St. Louis convention. Still, while a majority of the delegates will adopt the party's platform and a two-thirds majority will name the candidate for the presidency, the alienation of a strong minority may result in a bolt, or, at least, in internal dissensions and loss of tens of thousands of Democratic votes.

To put the matter in a nutshell, the conservative Democrats would ignore the platforms and issues of 1896 and 1900, refrain from reaffirming the former and nominate a "safe" and "old-fashioned" Democrat on a moderate, reassuring platform. Among those mentioned as conservative candidates are—in the order of their present relative strength—Judge Alton B. Parker, of New York; Richard Olney, of Massachusetts; Senator Arthur P. Gorman, of Maryland, and Judge George Gray, of Delaware. Ex-President Cleveland has had many ardent supporters, but he has, by unmistakable and direct declarations, taken himself out of the field. He has indorsed the candidacy of Judge Parker and thereby strengthened the latter's "boom" in the eastern states very considerably. At this writing the prevalent opinion is that Judge Parker, who has the solid New York delegation behind him, will be the choice of the convention. Mr. Olney, a better-known statesman of experience and force, will be the first choice of his state's delegation, but he is considered less "magnetic" and popular than the chief justice of New York, who has had none but judicial training. Senator Gorman is at present

merely a "possibility." He, too, has indorsed Judge Parker, though he is in no sense out of the race.

The leading radical candidate, who has the support of many of Mr. Bryan's former followers, is William R. Hearst, editor, congressman, trust-fighter, and millionaire. Three or four other men of prominence would be acceptable to the Bryan democracy, so-called, but Mr. Hearst is the only aspirant who has made an active campaign for delegates and instructions. Some weeks ago he seemed a



JUDGE ALTON B. PARKER
Democratic Presidential Candidate.

formidable factor; just now he is rather weak, his failure to get a single delegate in his own state, New York, having seriously affected his supposed chances. Mr. Bryan, who is fighting the "reorganizers" with vehemence and bitterness, is not himself a candidate nor is he supporting Mr. Hearst or any other aspirant. He is protesting against the repudiation of the last two national platforms of the Democratic party, and demanding a frank, clear, explicit declaration of what he calls "anti-plutocratic" doctrines. The platform adopted by the so-called "Parker convention" in Albany he denounces as ambiguous, evasive, meaningless, fraudulent. In this he is at one with the great majority of its Republican critics. The "Parker platform" is undoubtedly vague and full of political maxims rather than of debatable propositions; it can hardly be said to present issues to the country. But Mr. Bryan and his followers—and they are not numerous—assume that the Democratic party is a radical party misrepresented by the "reorganizers," whereas the majority of the Democratic newspapers and spokesmen earnestly assert that the Democracy is essen-

tially conservative, out of sympathy with Mr. Bryan and anxious to be freed from the "heresies" of 1896 and 1900 and to be "rehabilitated" in the eyes of the business and industrial interests.

At this writing it is more than probable that neither finance, silver, bimetallism, paper currency, etc., nor "imperialism" will figure as an issue in the national campaign. Tariff reform *vs.* high protection will doubtless be discussed to some extent but the principal issues will be found in foreign policy and in the attitude of the government toward corporate and consolidated wealth. Trusts, interstate commerce and its regulation, the future of the Sherman law, etc., are mere subdivisions of the latter issue. If the Democratic reorganizers succeed, their party will try to outdo the Republicans in conservatism and promises of peace and stability. What a contrast between the present situation and that of eight years ago!



The Fifty-Eighth Congress

What is called the "long session" of congress came to an end on Thursday, April 28—an unprecedentedly early date. The proximity of a presidential election was generally supposed to be the cause of the



PRINCETON INDORSES CLEVELAND

Mr. Cleveland may yet be forced to take the Democratic nomination.
—Minneapolis Journal.

hasty and abrupt termination of a session which left a good deal of important business unfinished or wholly unattended to and which as a matter of fact had been characterized by deliberate inactivity and by a pronounced disinclination to undertake "contentious legislation." But the leaders had announced at the beginning that beyond the adoption of the appropriation bills little would be attempted, and the slimness of the session's record has not therefore excited much surprise or comment.

It is to be remembered, however, that the regular session was preceded by a special session of about three weeks' duration, during which the house of representatives passed the resolutions giving legal force and effect to the reciprocity treaty with Cuba and made preparations for the regular session that subsequently resulted in much economy of time. Since there was but a "constructive" or infinitesimal recess between the special and the regular session, congress really remained at work for about six months.

What, in addition to the Cuban resolutions and the appropriation bills, did it enact into law during that time? Thousands of bills in the senate and in the house were introduced and many of them were discussed in committees and on the floor; but none of any public importance passed. The senate thoroughly debated (as did the

house) and ratified the Panama Canal treaty; there was no need of any action as to the canal by the popular branch, excepting the re-appropriating of the \$10,000,000 fixed by the so-called Spooner act as the price of the concession to the United States from the sovereign owner of the canal zone. The house passed a statehood bill, admitting Oklahoma and Indian Territory as one state and Arizona and New Mexico as another; the senate failed to act on this measure, which the Democrats had strenuously opposed as arbitrary and

contrary to the wishes of the citizens of the territories. It is doubtful whether the bill will ever become law in its present form. The Chinese exclusion act was continued, extended and verbally amended, to meet the peculiar condition created by the natural action of China in denouncing the treaty of 1894, which provided for the total prohibition of Chinese immigration to this country. It is believed by some that the exclusion act as reenacted violates our earlier treaties with China, but Attorney General Knox advised congress that this was not the case and that continued prohibition of Chinese immigration would not constitute a breach of international good faith.

What are the things congress has not done? Nothing has been done in the line of tariff revision; not even the duties on Philippine goods have been reduced, though Secretary Taft and the business interests of the archipelago have earnestly recommended such reduction. The argument was that any tariff legislation would reopen the whole question of protection *vs.* revenue duties pure and simple and disturb domestic industry and



WILLIAM R. HEARST
Democratic Presidential
Candidate.



Candidate Hearst has engaged hotel quarters at St. Louis sufficient to house an army. His delegates to the Democratic convention are to be entertained, roomed, and fed at his expense.—*News Item.*

—*Cleveland Plain Dealer.*

commerce. No financial legislation of any sort was passed—not even a bill authorizing the treasury department to deposit customs receipts, along with those from internal revenue, in the national banks.



THE LATE
SAMUEL SMILES
British Author.

Reciprocity was neither advanced nor discussed, in spite of the steady growth of public sentiment in New England and in the West in favor of a liberal reciprocity treaty with Canada. A bill for the protection of the president was favorably reported but not acted upon. Several other measures might be mentioned upon which, had the ses-

sion been permitted to reach the average length, action would probably have been had.

A feature of the session was the animated discussion of the alleged corruption in the postoffice department. The Democrats demanded an independent and searching congressional investigation, alleging that the Bristow inquiry had not brought everything to light. The Republicans accused the minority of "playing politics" and seeking campaign ammunition, and stoutly asserted that all the evils in the department had been explored and eradicated and all the guilty punished or dismissed. No investigation was authorized.

The total appropriations made by this congress aggregate \$781,575,000. Deducting amounts to meet deficiencies and the requirements of the sinking fund, the total appropriated for expenditures for the year 1905 is \$698,273,000. The total estimated revenue is \$704,472,000, leaving a very small surplus. The Democrats charge the dominant party with needless liberality and extravagance, especially in relation to the navy and the army.

Anti-Immigration Measures in England

British traditions regarding immigration are as humane and liberal as those of the United States ever were. England has for many, many generations been hospitable to aliens—the asylum of the oppressed of all nations. There is at this moment practically no legislation on her statute books restrictive of immigration.

For some years, however, politicians, newspapers and labor organizations have carried on propaganda in favor of more or less drastic exclusion legislation, in the interest of the national standard of living and of national integrity and character. The "new immigration," it is asserted, especially from Hungary, Russia, Poland and other countries of Eastern Europe, is a menace, morally and industrially, because it displaces well-paid British labor, produces congestion in the great centers and increases pauperism, vice, disorder and crime.

An anti-alien bill has been introduced in parliament after several promises on the part of the government to deal with the subject. Opinions differ as to its merits. Some say it goes too far and violates British principles and traditions; others declare that it is moderate and reasonable, aiming at nothing that is not essential to national safety and interest. The London *Spectator* thus summarizes its main provisions:

Masters of ships would be obliged to give lists of alien passengers, and the authorities were to be empowered to make searching inquiries as to character and antecedents,



BACK AGAIN FROM THE MILL

—Cleveland Plain Dealer.

etc. When necessary, aliens would be prevented from landing. Among these would be persons convicted of extraditable crime within the last five years, women of loose character, persons likely to become paupers and diseased persons. The home secretary could also expel any undesirable alien who had been a resident for less than two years. Aliens convicted of offenses might be called on to leave the kingdom after release from prison.

Further, there is a section providing that where immigration has caused overcrowding in a certain area the home office may issue regulations to abate that evil. Such congested districts may be closed to newcomers, temporarily or even permanently.

It will be seen that in some respects this bill is more radical than our immigration law, while in others it is less restrictive. There is no provision for an educational or property test, and industrious and honest men who seek work and opportunity in the country are not to be excluded. Nevertheless some of the best British periodicals oppose it as unnecessary and illiberal. Thus the *London Pilot* says: "The bill, if it proves effectual, will be a breach in the English tradition of welcoming all victims of persecution and giving them a chance of

raising themselves, and benefiting the country of their adoption. More probably it will simply add one more to the long list of statutes which constitute the stillborn children of parliament."



Anglo-French Agreement

An event of great political and diplomatic importance, one making for the peace of Europe and the progress of civilization, is the conclusion and signing of three treaties between Great Britain and France which practically remove every cause of friction that has long divided them. The French have regard-

ed "perfidious Albion" as their traditional enemy, and even as late as the period of the South African war nothing seemed more remote and unlikely than an amicable settlement of all the differences between these two leading naval and colonial powers. Add to this that France is an ally of Russia and England of Japan, and that only three months ago the Far-Eastern conflict threatened to involve them in a terrible war, and the event becomes truly extraordinary. The explanation is that the Russo-Japanese struggle threw all alliances into the melting pot and that as interests change popular sentiment almost automatically undergoes corresponding change. Harmonious relations between England and France cannot fail to strengthen the Franco-Russian alliance, though the agreement, as Germany recognizes, is not deliberately directed against any other power.

The treaties cover the Egyptian question, the Morocco question, the old Newfoundland difficulty, West African frontier problems and other matters.



THE LATE FRANCES
POWER COBBE

British Author.



A MUTUAL SACRIFICE:
or, L'Autel du Libre E'change.

—London Punch.

France recognizes the predominant position of England in Egypt, and promises not to revive the question of evacuation. Financial reforms accompany this settle-



THE LATE ADMIRAL
MAKAROFF

Who went down with the
Petropavlovsk in battle.

ment, the Egyptian treasury becoming as independent as that of any other country and obtaining freedom to apply any surplus to internal improvements, instead of hoarding it against contingencies in the interest of foreign bondholders.

Great Britain acknowledges French supremacy in Morocco and agrees to allow France to reform and reorganize the Moorish king-

dom; but the coast opposite Europe is not to be occupied or annexed by the predominant power. Siam is to be independent, but it is to be divided into two spheres of influence, France being predominant east of the Menam, England west of the river. The "shore" rights claimed in Newfoundland are waived, the French securing compensation in West Africa in the shape of 80,000 square miles in Nigeria and free access to Lake Chad.

Without going into further details, it is sufficient to say that all grounds of discord are swept away by these agreements, and the two powers will be more inclined than heretofore to discuss projects of limiting naval expenditures. There has been no criticism of the treaties in either country, and the Balfour ministry has been warmly congratulated even by the Liberals upon this diplomatic achievement.

Now the English and the Russian newspapers are beginning to discuss the possibility of a similar agreement covering the more threatening questions of Persia, Tibet and India. Cannot Persia be treated as Siam has been—divided into spheres of

influence? Cannot the security of India be made absolute by a compromise with Russia as to the territorial and commercial problems of Middle Asia? The British mission to Tibet, with its "incidental" bloodshed, has emphasized the need of such a compromise. Russia is accused of seeking to obtain special privileges in Tibet, and England declares that if any privileges are to be given, she, not Russia, shall be the beneficiary. The attitude toward Russia, nevertheless, has notably improved in England—as a by-product of the agreement with France, it is generally believed. These developments cannot be altogether pleasing or reassuring to Japan.



In Behalf of International Peace

For years the International Peace Congresses have been a striking feature on the Continent and in Great Britain. They have served to bring leading individual citizens of the various nations into closer relationship and knowledge one of another. They have furthermore aided in the creation of an international conscience which is destined to play an increasingly important part in international politics. We are beginning to see manifestations of it on many sides. The *rapprochement* of England and France following the concluding of an arbitration treaty and the sentiment which is working throughout the Continent in favor of mediation in the Russo-Japanese War are instances of what is meant.

The thirteenth congress is to be held in this country next October. Boston, which claims the honor of having founded the first influential Peace Society in the world, will be the meeting place. Mayor Patrick A. Collins declared his purpose if Boston were selected, to call a special meeting of the solid men of the city at the city hall and urge generous financial support for the congress. In his letter urging the selection of his city, he wrote: "We all in Boston feel that this city, which has always been the headquarters of the peace movement in America, is emphatically the place for this

gathering. I wish to say to the committee that if the congress comes to Boston it will receive the warmest welcome and hospitality, and Boston will do its utmost to make it a conspicuous and memorable success." This is a notable sentiment from a prominent leader of the Irish-American element.

The executive committee which will have entire charge of the congress consists of Edwin D. Mead and Benjamin F. Trueblood of Boston; Walter S. Logan and Hon. George F. Seward of New York, formerly minister to China; Philip C. Garrett and Judge William N. Ashman of Philadelphia; Dr. Richard H. Thomas of Baltimore; Edwin Burritt Smith and Professor Graham Taylor of Chicago; Mrs. Hannah J. Bailey of Maine, Mrs. Charles Russell Lowell of New York, and Mrs. May Wright Sewall of Indianapolis. The committee organized by the choice of Edwin D. Mead as its permanent chairman, and Dr. B. F. Trueblood as secretary. It voted to present the name of Hon. Robert Treat Paine, president of the American Peace Society, for president of the congress, and the following-named American vice-presidents: Hon. George F. Edmunds, Hon. Andrew D. White, formerly ambassador to Germany, Rev. Edward Everett Hale, Andrew Carnegie, Edwin Ginn, Albert K. Smiley, the founder of the Mohonk Lake Arbitration Conferences, and David Starr Jordan of Leland Stanford University.

A notable delegation of British and continental advocates of peace and arbitration is expected, and after the congress it is proposed to have the delegates visit the leading American cities, speaking for the cause they represent.



The Military Situation in the Far East

If the destruction of the *Petropavlovsk* and the loss of "the pride of the Russian navy," Admiral Makaroff, in that disaster, ended the second act of the war drama, the operations along the Yalu River may be regarded as the beginning of the third act. Since our last review of the situation the conflict has indeed assumed a new phase.

Japan, for reasons that even the military experts have not satisfactorily explained, failed to follow up her successful naval operations. It is officially admitted by Russia that a Japanese mine sunk the great battleship and damaged the *Pobieda*. Why, after this extraordinary piece of good fortune, Admiral Togo did not renew the effort to seal up the remnant of the Port Arthur fleet it is not easy to explain. Perhaps, with absolute command of the sea and freedom to move transports through the Straits of Pechili, the fate of the crippled squadron, and even of Port Arthur itself, became a matter of little moment to the Japanese. Vladivostok, too, was left severely alone, though its squadron has ventured out of the harbor and inflicted some damage, in Korean waters, upon Japanese vessels. Early in May, however, it was reported that Admiral Togo had blocked the entrance to Port Arthur and siege had begun.

General interest was speedily transferred to the active preparations for land engagements. While some Russian troops were reported as carrying on minor operations in Northeastern Korea, the whole left bank of the Yalu was in possession of the Japanese. Would they cross the river and invade Manchuria? Was Russia's plan of campaign offensive or defensive? Would the crossing be resolutely opposed, or would the enemy be permitted to penetrate into Manchuria? There were some who thought that Japan's best policy was to land at Yinkou, the port of Niuchwang, and proceed to cut off Port Arthur by attacking the railroad connecting it with Harbin. But the Russians had counted on that movement and concentrated troops at that place. Accordingly, the force-



THE LATE VASSILI
VERESTCHAGIN

Russian painter lost in
Petropavlovsk disaster.

ing of the Yalu once more appeared to be the easier task.

In the last week of April, a total force of 100,000 men having been gathered, the



ADMIRAL
SKRYDLOFF

Appointed to command
the Russian fleet.

Japanese crossed into Manchuria at two or three points without serious difficulty. The Russians harassed the enemy somewhat and retarded the advance, but no loss of consequence was sustained by the invading army. Several days of fighting followed, in which the Japanese enjoyed the advantage of superior strength. They occupied several villages and towns

opposite their Korean base, Wiju, and compelled the Russians to retire to Feng-huang-cheng.

The Russian general staff preferred to regard the Japanese advance with equanimity. Retreat, it was stated, was part of General Kuropatkin's plan of campaign, first because he wished to entice the enemy deeper and deeper into Manchuria, where the army would be deprived of the support of the navy and where every additional mile of occupied territory would increase the difficulties of communication, transportation and sustenance, and, second, because he needed, above all things, time, delay, opportunity. With 300,000 men in the field—railway guards and garrisons at remote points not included—the Russian commander promises to assume the aggressive and to drive the Japanese back, not only out of Manchuria, but out of Korea. How soon he will have his "irreducible minimum," it is hardly possible to say; until he gets it the Japanese, if they are so minded, can continue their forward movement.

How far will they deem it prudent to go? Will they try to capture Harbin, the great

railroad center, or Mukden, the Manchurian capital? And where will their second army, whose destination has been a matter of much speculation, strike? Baron Hayashi, the Japanese minister to Great Britain, has stated that the Mikado's forces in Manchuria cannot long remain on the offensive, and that at a certain point they will stop and invite Russia to dislodge them. The "point," however, has not been indicated, for obvious reasons.

At this writing, then, the military advantage is with the Japanese. They have won no decisive victory on land, but they have accomplished much without it. They will doubtless soon be ready to consider peace proposals on the basis of the *status quo*, especially if Port Arthur should fall or should become useless to the Russians. Russia, on the other hand, in view of reports in European papers derogatory to her dignity, has been at pains to announce officially that the war will continue until victory shall have avenged Russian honor and restored Russian prestige and supremacy in the East, and, further, that no foreign power or combination of neutral powers will be permitted to dictate or to direct the ultimate settlement of peace terms. No second Congress of Berlin will be tolerated by Russia—if she wins. But what if she loses? Will she allow Japan as much freedom of action as she claims for herself in advance of the occasion? Or will she welcome and secretly instigate the intervention of the European concert?

This, however, is premature discussion. Meantime battles, not negotiations, are expected, and both belligerents are making arrangements to float new bonds in neutral money markets. Russia has secured a heavy loan in France, though her gold



THE RUSSIANS ARE LURING THE JAPS INTO
THE INTERIOR

—Chicago Tribune.

reserve is not exhausted, while Japan has been successfully "sounding" English and American financiers as to the terms of a loan.



Municipal Ownership and Reform in Chicago

Two years ago Chicago attracted national attention by voting at what was called an "academic" referendum, for municipal ownership of street railways and gas and electric lighting. The voters, under a then new act providing for such expressions of public opinion, were invited to declare what policy they favored with regard to public utilities, and they unmistakably indicated their preference. An overwhelming majority of those who voted on the proposition at all voted for municipal ownership. Much surprise and speculation, comment and moralizing, followed Chicago's "startling" verdict.

But, as the referendum was of a Platonic character, it was agreed that no one was called upon to do anything in conformity with the popular verdict. Nothing was done. Two years elapsed, and the question of local transportation being still open, unsettled and terribly mixed, the friends of municipal ownership once more, by petition, forced the submission, at the municipal elections of April, of propositions looking to

immediate municipalization of the street railway system and the substitution, for the period of transition and preparation, of revocable licenses for fixed-term franchises to the private traction companies. To those who were familiar with the Chicago street railway situation and the history of the controversy between the city and the traction companies, and who were sober-minded and able to see facts as they are, the results of this second "academic" referendum contained no element of surprise. To many, however, they came as a shock and revelation.

Three propositions or questions were submitted to the people: 1. Shall the so-called Mueller act—an act passed after a stormy agitation and a fierce struggle by the state legislature authorizing municipalities to acquire, construct, own and operate street railways—be adopted and made law so far as Chicago is concerned? 2. Shall the city, in the event of the adoption of the Mueller act, proceed at once to acquire, by purchase or condemnation, the street railway properties of Chicago? 3. Pending such acquisition shall licenses revocable at the will of the city be given to the present companies, instead of franchises for fixed terms?

Here is how the people voted on these questions?

For the adoption of the Mueller "enabling" act, 152,434; against, 30,104; majority for the proposition, 122,330.

For immediate municipal ownership, 120,744; against, 50,893; majority "for," 69,851.

For temporary licenses, 120,183; against, 48,056; majority "for," 72,127.

There is nothing about this popular verdict which invites misapprehension or misconception. Is Chicago "a municipal ownership town?" it is naively asked. The vote should have rendered the question superfluous. A majority of those who were interested in the burning municipal question, the "paramount issue" in the last three mayoral elections, voted for municipal ownership in April for the second time, and it is idle to blink at the fact that they meant what they said at the polls.



SIGNING FOR THE OLD JOB

THE YEAR—I may not have made a great success at that, but I certainly did it better than my present role.

—Minneapolis Journal.

Why is the second city in the country "a municipal ownership town?" This is a question of a very different character. The answer thereto is found in the city's experiences under private ownership and operation. Nothing can be more antiquated, miserable, exasperating and execrable than the sort of transportation service Chicago has been getting. And, owing to alleged grants from the state legislature obtained in 1865 for a period of ninety-nine years, the companies cannot be forced to accept the conditions and restrictions which the city would like to impose. Many compromises have been tentatively suggested, but so far it has been impossible to reach an agreement. The city is committed to the principle of adequate compensation for the privilege of exclusive use of the streets for street railway purposes, to a present and final waiver by the companies of all "rights" supposed to have been granted by the state, to a short term with the privilege of purchasing the property at the end of a certain period, and to effective control and regulation of the service. One of the companies, which is insolvent by the way, has secured an injunction restraining the city from interfering with it in any manner.

These causes, together with persistent attempts to obtain legislation adverse to the city, have produced the effects that have startled the country. However, all the indications are that the franchises will be renewed, and that the policy favored by the voters will be postponed. The mayor and the council are opposed to municipal ownership in the immediate future, asserting that

it is financially impossible and politically unsafe and undesirable. It is true that the city has no funds for permanent improvements, and no power to raise any, having reached the limit of the bonded indebtedness she is entitled to incur; but the advocates of municipalization allege that this is no bar to the adoption of the policy demanded by the majority of the voters. Within five years, they say, all obstacles will be removed, and they accordingly insist on abandoning all franchise negotiations and giving the companies temporary and revocable licenses. Interesting developments may be looked for, especially in view of the fact that no street railway ordinance can be passed and put in force without a favorable vote of the people. To a referendum on the franchise question the mayor and the council are formally pledged. Any ordinance unnecessarily at variance with the popular mandate is certain to be rejected by an overwhelming vote.

In addition to the questions bearing on traction matters, the following proposition was submitted to the voters at the election of April 5: "Should the Chicago board of education be elected by the people?" Under existing law the members of the board of education are appointed by the mayor and confirmed by the city council. The vote on this question was: For, 115,553; against, 58,432. The opposition in the press and among the citizens active in public affairs was more solid and earnest as regards an elective board of education than as regards any other proposed change. But one newspaper advocated the election of the



INTERNATIONAL BURGLARS!

—Berlin Jugend.

board, whereas all the papers but two urged the acceptance of the Mueller act. It was argued that the office of school trustee should be regarded as nonpartisan; that the Chicago school system had been well managed and had shown steady improvement, and that the elective plan would "drag it into politics" and give machines and spoils-men control of its finances and administration. These arguments failed of effect, possibly because the average voter could not see why a method applied to aldermen, the mayor, the sheriff, the state's attorney and even the judges of all the courts of the state should be dangerous and pernicious in one particular direction. The voters refused to express distrust of themselves. Nevertheless there is no likelihood of an early attempt to change the method of electing school trustees. The question, it must be admitted, has not been adequately—if at all—discussed in the press or on the platform.



Evidences of Municipal Progress

Optimism of the right sort was the notable characteristic of the tenth annual meeting of the National Municipal League recently held in Chicago. The proceedings will be published in full and the volume should be in the hands of all students of municipal problems. What are some of the evidences of progress upon which optimism is based? Secretary Clinton Rogers Woodruff's report showed first, that "investigations, indictments, trials, convictions for municipal shortcomings and dishonesty have been the order of the day throughout the whole country during the last year." Unprecedented in number and success (note Milwaukee, Minneapolis, Denver, Green Bay, Wisconsin, St. Louis) the conclusion is that every scandal unearthed and every offender punished proves increasing determination on the part of the people to improve conditions. In New York City the beginning of Mayor McClellan's administration (retaining Mayor Low's street cleaning commissioner, and recognizing merit in the health department, acting before-

hand instead of behindhand in police administration) indicates that reaction to the lowest former level has become improbable.

Signs of improvement in many quarters have been mainly due to the activities of bodies like the Municipal Voters' League of Chicago, the Civic League of Kansas City, the Good Government League of Boston, the City Club of Galveston, the Merchants' Association of San Francisco, the Citizens' Association of Chicago. Such organizations persistently keep up the fight for good government and new organizations take courage and emulate their practical example in other cities. President Charles Bonaparte's address threw out the suggestion that reformers had learned much from defeat and that, conditions being as they are, it is common sense for the independents to maintain an attitude of willingness to close with that political party organization which makes the highest bid in the shape of definite reforms.

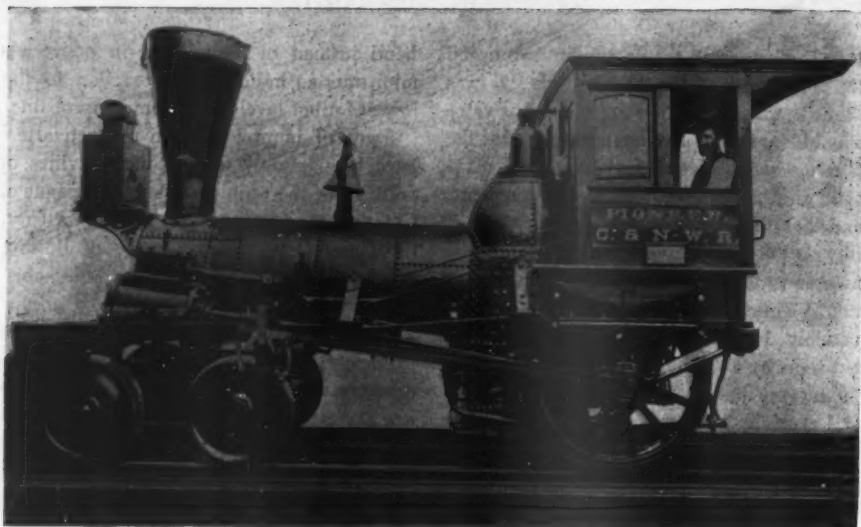
The work of the National Municipal League in behalf of uniform municipal accounting is important, though perhaps less spectacular than other reforms; to obtain a basis of comparison between the finances of cities is obviously a distinct public service.

Increased coöperation and coördination of work by kindred societies, of national scope, a "Civic Week" of addresses and conference at the St. Louis Exposition in June, and a repetition of "Civic Week" at Chautauqua in July successfully inaugurated there last season, must be included in the current evidences of progress recounted at the League convention. And it was interesting to hear Mr. Lincoln J. Steffens, by reason of his journalistic investigation of conditions in many cities, report that the grafters themselves seriously declare that "graft has got to stop; it's too bad to go on."



Judge—You admit you sand-bagged the man. Have you any excuse?

Prisoner—Yes, yer Honor. De sand-bag wuz me own property and J. P. Morgan says a man has de right ter do wot he pleases wit' his own property.—Puck.



THE "PIONEER"

The first engine running out of Chicago. Arrived by boat Oct. 10, 1848. Owned by the Chicago and Northwestern Railway Company.

Evolution of the American Railroad

BY GEORGE B. WALDRON, A. M.



THREE-QUARTERS of a century ago there was not a mile of railroad track on the entire American continent. Today the railroads of the nation comprise 210,000 miles. Their capital stock and bonds aggregate \$12,500,000,000, or an eighth of the entire wealth of the nation. Their gross yearly earnings are \$1,800,000,000. They give employment to 1,250,000 people and pay \$700,000,000 a year in wages. And all this in the comparatively brief span of seventy-five years.

Even as late as 1850 there were but 9,000 miles of railroad in the country. Ten years later the mileage had lengthened to 30,000. Eleven years more and, in spite of the ravages of war, railroad mileage had doubled to 60,000. And so the ball has been rolling on with ever-enlarging accretions. The last quarter century has witnessed the creation of more railroad than was built

during the entire preceding half century.

Were the present railroad mileage evenly distributed over the nation's surface there would be no point more than seven miles away from some line. But it is far from being evenly distributed. While for the country as a whole there is an average of seven miles of railroad to each one hundred square miles of territory, in the District of Columbia there is more than seven times as much railroad in proportion to area. The state of New Jersey has an average of 30 miles of line to each 100 square miles of area, Massachusetts has 26 miles, Pennsylvania 23 miles, Ohio 22, Connecticut 21, and Rhode Island and Illinois 20 miles. Contrast these states with Nevada which has but eighty-seven hundredths of one mile of railroad for each one hundred square miles of territory. Idaho, Oregon, Wyoming, Arizona and New Mexico have less than two miles of rail for each similar area. During

recent years the largest increases in railroad building have been in the southern and Gulf states.

Measured on the basis of population served, Nevada leads the list with a mile of railroad to every five citizens. Montana, Wyoming and Arizona have an average of a mile to each eight people. At the other extreme the District of Columbia is served with one mile for every 900 of population. Rhode Island averages a mile for each 200 people and Massachusetts a mile to every 135 of population.

Enormous quantities of rolling stock are required to equip this vast network of roads. Locomotives alone number 41,000, of which 10,000 are in passenger service, 24,000 haul freight and 7,000 are required for special service. There are 37,000 cars needed to move passengers, and 1,600,000 cars to carry freight. Were all these engines and cars in use at the same time there would be a passenger train for every twenty-one miles of road in the United States and a freight train for every nine miles. End to end the passenger equipment would make a solid train five hundred miles long. The

freight cars and engines would make another train about nine thousand miles long, or nearly three times the entire distance from the Atlantic to the Pacific.

A thousand million miles is covered by the various trains during the year—450,000,000 by passenger trains and 550,000,000 by freights. This means that the trains of the nation, passenger and freight, cover 2,750,000 miles every day, or an average of 114,000 miles an hour. The mileage of the individual freight cars makes a distance inconceivably great. They run far enough to girdle the earth at the equator each minute, day and night, every day in the year. They run an aggregate of 40,000,000 miles a day and over 14,000,000,000 miles a year.

The work done by these railroads is measured by the number of tons of goods transported one mile. The average locomotive will draw three hundred tons of goods a mile every three minutes. It would take a man and his team ten times as long to haul a single ton one mile. In other words, an hour's work of the locomotive represents the labors of three thousand horses and their drivers for the same time.

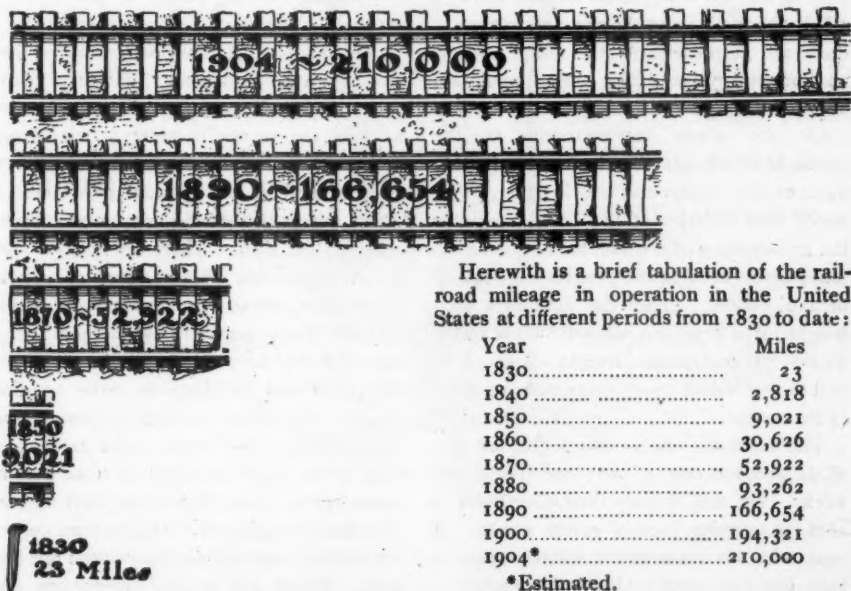
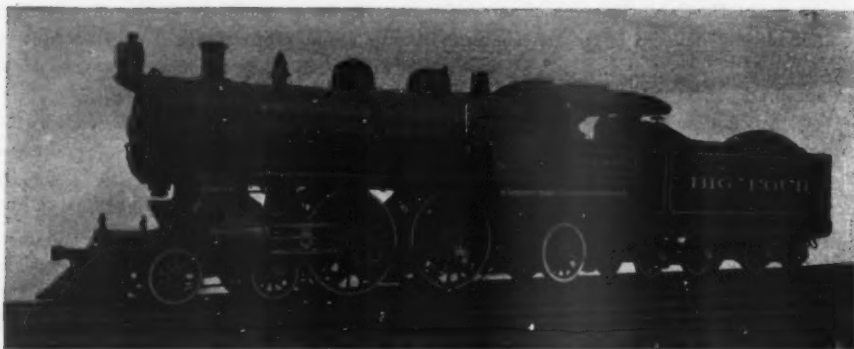


DIAGRAM AND TABLE OF RAILROAD MILEAGE



THE "CHAUTAUQUA" TYPE OF LOCOMOTIVE

One of the modern passenger engines built at the Brooks shops of the American Locomotive Company.
Total weight in working order, 186,100 pounds.

The freight trains of the nation carry 1,250,000,000 tons of goods during the year in an average haul of 135 miles per ton. This means that they transport a total of about 170,000,000,000 ton miles. With every second of time the railroads do enough work to transport a ton of goods 540 miles, or half the distance from New York to Chicago. It would take 25,000,000 teams and their drivers to do as much. The work performed by the railroads, if done in the old way, would require two and a half times as many horses and mules as there are at present in the entire nation, and practically the entire male population over fifteen years old.

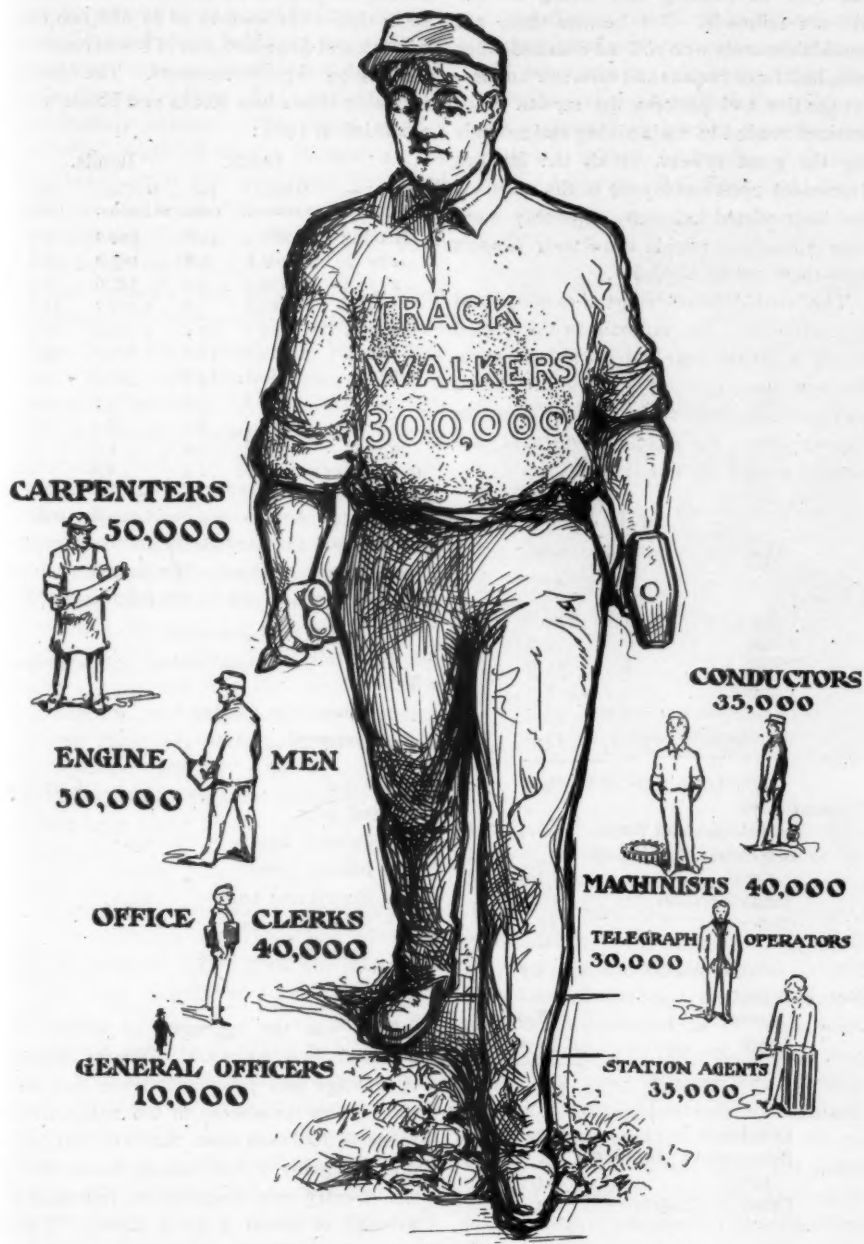
On the whole, so enormous are the demands of our modern civilization, that to feed, clothe, shelter and provide the various needs and luxuries of the people requires the transporting of a whole ton of goods 280 miles every week in the year for each family of the nation. Load the country's total freight for a year into one solid train and it would fill 40,000,000 freight cars, which end to end would cover every mile of track of the nation.

The railroads charge the enormous sum of \$1,250,000,000 a year for doing this work. Yet this is only three-fourths of a cent for carrying a ton of goods a mile. A man with his team would charge thirty to forty times as much to do the same work.

Nor does this estimate take account of the

passenger service. The railroads take toll amounting to \$400,000,000 a year for carrying passengers. But to earn this money they transport 700,000,000 passengers an average of thirty miles each. This is an aggregate of 21,000,000,000 passenger miles a year, or 700 miles with every stroke of the clock. The railroads thus average about two cents a mile for each passenger carried. We are a nation of travelers, since on the average every man, woman and child uses the railroads to the extent of 300 miles a year.

To carry on this enormous traffic requires an army of 1,250,000 men, and their yearly pay aggregates \$700,000,000. Among these workers are 10,000 presidents, vice-presidents, general managers and other general officers, and 40,000 general office clerks. There are 35,000 station agents and 110,000 other station men. There are 30,000 telegraph operators. The care of tracks requires 35,000 section foremen and nearly 300,000 track walkers. Watchman, flagmen and the like number 50,000. To keep the trains and buildings in order requires 40,000 machinists, 50,000 carpenters and 140,000 other shop men. The actual running of the trains requires 225,000 men or about one in every five of the total number of railroad employees. Of the men 50,000 are engine men and as many more are firemen. There are 35,000 conductors and some 90,000 other train men.



COMPARATIVE FIGURES SHOWING THE NUMBER OF RAILWAY EMPLOYEES

These 1,250,000 people are directly employed in running and caring for the nation's railroads. But besides these are untold thousands who roll out rails and other iron, build locomotives and cars, saw lumber, cut the ties and perform the myriad other services needed in maintaining and extending the great system. With the families dependent upon employees of the railroads and their related industries, probably more than 7,000,000 people draw their support from these public highways.

The latest detailed report of earnings and expenditures of the railroads of the United States is for the year ended June 30, 1902. It covers 200,155 miles of line and is based on reports made to the Interstate Commerce Commission. The leading figures in millions of dollars are as follows:

INCOME AND EXPENDITURES

(Year ended June 30, 1902)

Millions of Dollars.

Earnings

Passenger.....	401.8
Mail.....	39.8
Express.....	34.3
Freight.....	1,212.1
Other from operation.....	38.4
Investments (net)....	43.0

Total.....1,769.4

Expenditures

Maintenance of Way. .	248.4
Maintenance of Equip- ment.....	213.4
Transportation.....	610.0
General.....	45.0

Total.....1,116.8

Net Earnings.....652.6

Interest.....	268.0
Taxes.....	54.4

Total.....322.4

Available for dividends.....330.2

Dividends.....	157.2
Permanent Improve- ments.....	34.7
Other Expenditures....	43.4

Total.....235.3

Surplus.....94.9

It will be noted that \$157,000,000 is paid in dividends and \$268,000,000 in inter-

est, making a total of \$425,000,000 going during the year to the holders of the various securities. Yet owners of \$2,686,000,000 of stock and \$294,000,000 of bonds received nothing on their investments. The following table shows how stocks and bonds were rewarded in 1902:

Stock.			Bonds.		
Per Cent Paid.	Millions of Dollars.	Per Cent.	Millions of Dollars.	Per Cent.	
Nothing	2,686.5	44.6	294.2	4.9	
1 to 2	107.8	1.8	105.2	1.8	
2 to 3	212.1	3.5	327.6	5.4	
3 to 4	183.8	3.0	1,903.7	31.6	
4 to 5	812.2	13.5	1,769.5	29.4	
5 to 6	616.6	10.2	845.3	14.0	
6 to 7	770.1	12.8	583.4	9.7	
7 to 8	333.7	5.5	175.3	2.9	
8 to 9	184.3	3.1	12.4	0.2	
9 to 10	34.5	0.6	1.5	.05	
10 and over	82.6	1.4	2.7	.05	

Total 6,024.2 100.0 6,020.8 100.0

The total investments in railroads represent enormous values. The figures on June 30, 1902, are shown by the following table:

SECURITIES

Millions of Dollars. Millions of Dollars.

Stocks.

Common.....	4,722.1.
Preferred.....	1,302.1.

Total.....6,024.2.

Bonded debt.

General bonds....	5,213.4.
Income bonds.....	242.6.
Equipment trusts..	89.2.
Miscellaneous.....	564.8.

Total.....6,110.0

Aggregate.....12,134.2

This was the aggregate of stocks and bonds on June 30, 1902. With the increase in mileage and equipment since that date the present investment in the nation's railroads is doubtless more than \$12,500,000,000. Equally divided among the families of the country this wealth would represent an average of about \$780 a family. These stocks and bonds receive about \$450,000,000 this year in dividends and interest, or an average of some \$27 a year to each family.

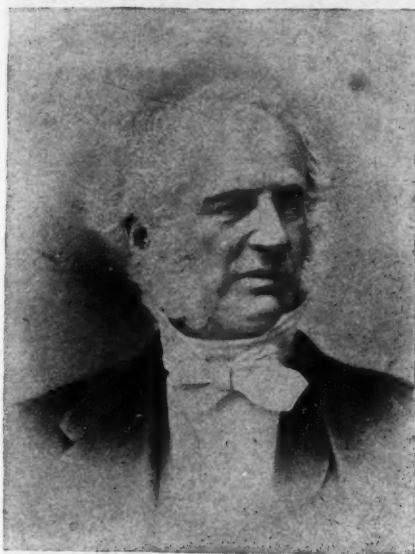
It is estimated that the actual ownership of these securities is vested in about 100,000 people, and those holdings range all the way from a few shares up into the hundreds of millions of dollars. But ownership is not necessarily control. The actual running of substantially all of the railroads of the United States is now practically controlled by probably fewer than a score of people representing four or five of the great business houses on Wall street.

The nation's first railroads were short stretches from city to city. Later some of these were consolidated into longer lines and then amalgamated with gradually spreading systems. An example of this process was the Harlem railroad, which in 1852 ran from New York City north 131 miles through the woods toward Albany. The property was almost bankrupt, knowing ones on "the street," as knowing ones do, laughed at the possibility of its ever being anything more than two streaks of rust. One man, however, had long thought differently. He remembered that the road possessed franchises into the heart of a city already the metropolis of the western hemisphere, franchises that some time must prove enormously valuable. And so quietly he put one or two hundred thousand dollars into a large block of the company's depreciated bonds. It was the opportunity for which he had long been waiting.

Another five years passed and in the panic of 1857 Harlem stock dropped to three dollars a share. Here again was his opportunity, and steadily he accumulated these securities. When the company was on the verge of collapse he consented to be a director. The nation became divided in civil war, but this clear-eyed, cool-headed man never loosened his grip on Harlem. More and yet more of its stock went into his strong box, until in 1863 Commodore Cornelius Vanderbilt was president and chief owner of the road. Its stock, which six years before was being "kicked about the street" at three dollars a share, was then selling at seventy.

Along the banks of the Hudson, a rail-

road, known as the Hudson River line, extended from New York to Albany. Commodore Vanderbilt obtained control in 1865 and was made its president. From Albany to Buffalo ran the New York Central, originally composed of eleven separate roads. This, too, fell into his hands. A union of these properties—the New York Central,



COMMODORE VANDERBILT

the Hudson River line and the Harlem—became the backbone of the present New York Central and Hudson River line. Their combined capital stock before the consolidation was \$60,000,000, but so skillfully was the combination financed that the New York Central and Hudson River, the new company, started its existence with a capital stock of \$90,000,000, and the stockholders for years received their eight per cent on this capital.

Thus was formed the nucleus of the vast system of roads, which, under the general name of Vanderbilt, comprises some 20,000 miles of line represented by securities above \$1,000,000,000.

Meanwhile a new financial star had appeared in the person of Jay Gould. As with Vanderbilt, the panic of 1857 gave Gould his opportunity. For a purely nom-

inal sum he bought the bonds of two small railroads connecting Troy, New York, with Rutland, Vermont. In less than two years he had extricated the property from financial embarrassment, consolidated it with another road and disposed of his holdings



JAY GOULD

at enormous profit. Gould found a kindred spirit in "Jim" Fisk, and together they went forward on that career of railroad wrecking so familiar to the people of a generation ago. Gould bought largely into the Erie, and with Daniel Drew, the "Ursa Major" of his day, crossed swords with Vanderbilt over that property. The Commodore finally withdrew in disgust from the field and the Gould clique were able to take millions out of Erie.

Enormous as were the profits from wrecking, Gould had learned that those from regeneration might be even bigger. Grad-

ually an ambition for larger empire seemed to possess him. In his various operations he gained the mastery of the Wabash. The Missouri Pacific, extending from St. Louis to Kansas City, was in the same territory and its chief rival. It was friendly, however, through the fact that Ben W. Lewis, manager of the Gould property, was a close friend of Commodore Garrison who controlled the Union Pacific. Toward the close of 1870 Lewis presented his resignation. Gould saw breakers ahead and asked Lewis what was necessary to retain his services.

"Buy Missouri Pacific" was the reply.

Gould saw Oliver Garrison, the Commodore's brother, and offered \$1,500,000 for the Garrison interests. The Commodore laughed when he heard it, and raised the price to \$2,800,000. Gould protested, but when he returned next day the figure had gone up another million. This was too much for the "Wizard." Telling the story of his transaction with the Commodore afterwards to a congressional committee, Gould said:

"I had a very short negotiation with him. He gave me his price just as we are talking here, and I said,—'all right, I will take it,' and I gave him a check for it that day."

That was the beginning of the Gould system which today comprises nearly 17,000 miles of road. At that time the Missouri Pacific and the Wabash together were earning \$9,000,000 a year. The present annual receipts of the Gould roads are about \$100,000,000.

Once in his career Gould met signal defeat. It was in 1869 and he and Fisk had set their hearts on getting the Albany and Susquehanna to give their Erie property an outlet from Binghamton into Albany. They owned only 6,500 shares of the 30,000 of stock in the line, but this was of little importance to them. Fisk organized a gang of thugs, transported them to Albany and took forcible possession of the property. A sham meeting of stockholders was held and the old officers were replaced with new ones favorable to the gang. In

their despair the ousted stockholders appealed to a young New York banker. With characteristic courage and sagacity this man took up the battle. He carried the difficulty into the courts, won twenty-five law suits, baffled injunctions innumerable and at last drove the wreckers from the field. The road was again restored to prosperity and sold at a high price to the Delaware and Hudson, which still controls it. That banker was J. Pierpont Morgan.

Morgan had already shown his metal by floating \$200,000,000 of government bonds in Europe after the financial depression of 1873. He was becoming a power in the Vanderbilt roads. His connection with that property began as far back as 1860 when the Commodore decided to strengthen the position of the New York Central by putting large quantities of its stock into the hands of the public. The Morgan, London and New York houses took \$40,000,000.

In the rebuilding days following the panic of 1873 the Vanderbilts wished to issue bonds on the New York Central to improve and extend the property. Appeal was made to Morgan, whose honesty and acumen were so well recognized in London that he was able to get \$30,000,000 for the purpose from English capitalists. Morgan became a director of the New York Central in 1879 largely because of that achievement. Yet few recognized even until recently the influence he wields in that system. Some five years ago an officer of the Central, now dead, was questioned as to who was the real power on the road.

"Is it Depew?"

The officer lifted his eyebrows and shook his head.

"Who then?" was asked.

"The man who has the last word," was the reply, "is J. Pierpont Morgan."

Where Morgan stands today with respect to the New York Central he who runs may read. Every instinct of this man's genius is to build up. His first large work in this direction was the reorganization of the New York, West Shore and Buffalo. This road had been built along the west bank of the

Hudson expressly to compete with the New York Central. When the lemon had been sucked dry it was abandoned, broken and almost valueless. Mr. Morgan restored the property and leased it to the New York Central. This was in 1885.

About the same time he saved the Balti-



"JIM" FISK

more and Ohio from the financial ruin threatened by reckless schemers. He regenerated the Chesapeake and Ohio and joined it to the "Big Four," thus strengthening both properties. He took hold of the Erie, which had remained in bad condition since the wrecking days of Fisk and Gould. He reorganized the Reading, and has built up the Southern Railway. And so runs the story of his works.

In the early days of the railroad, the lines being few and short, there was little opportunity for competition between roads.

When the lines broadened into systems with overlapping territories, then rate troubles began. After years of fighting the companies, worn out by warfare, would patch up temporary truces only again to bring on



J. PIERPONT MORGAN

fighting hotter than ever through secret rate cutting. Thus the alternations of war and peace continued for many years.

At length the leading companies fixed upon a pooling agreement whereby rates were fixed and traffic distributed according to certain percentages agreed upon among the competitors. Wars were still frequent but the results of the pooling as a whole were salutary. Then in 1887 congress stepped in and declared these pooling agreements illegal and the Supreme Court of the United States has strengthened its enactments. Open pooling was superseded by the private "gentlemen's agreement." But this makeshift was only partially successful in stopping rate wars.

Shrewd men saw that some new methods must be put in operation. The lamb must be made to lie down within the lion. Opportunity came with the panic of 1893 and the years of hard times that followed. Thou-

sands of small stockholders were compelled to part with their railroad holdings which were taken by strong interests. Railroads themselves were forced into the hands of receivers, so that at one time 36,619 miles, or over a fifth of the entire mileage of the country, was in bankruptcy. When the great systems emerged from the shadows stronger than ever they were controlled by large banking interests, chief among which was the house of Morgan. Prosperity again reigned and the time was ripe for the next onward move.

In the summer of 1899, as a clap of thunder out of clear sky, came the announcement that the New York Central had made arrangements to lease the Boston and Albany. About the same time a new president had been placed over the great Pennsylvania system. The financial world felt that something of tremendous import was pending when the presidents of the Pennsylvania and the New York Central laid aside all precedent and met in conference. Then came the statement, at first vigorously denied but later confirmed, that the two companies had buried their old differences and reached a mutual agreement on all questions.

The two companies bought large blocks of Chesapeake and Ohio and Norfolk and Western stock which they divided among themselves. They laid out a new common route through coal properties in Northern Pennsylvania. They apportioned their general territory and agreed upon a division of feeding roads. It was the turning event of the new era in American railroading, the era of railroad "community of interest."

A new master builder has arisen in the Northwest. Forty-seven years ago "Jim" Hill, eighteen years old, fresh from his Canadian home, was shoveling cargo into steamers in St. Paul at fifty cents a day. Nine years later he was made local agent of the St. Paul and Pacific at St. Paul. The road defaulted in 1873, and passed into the hands of receivers.

During his seventeen years' residence in the city, Mr. Hill had made powerful friends. He persuaded them that here was

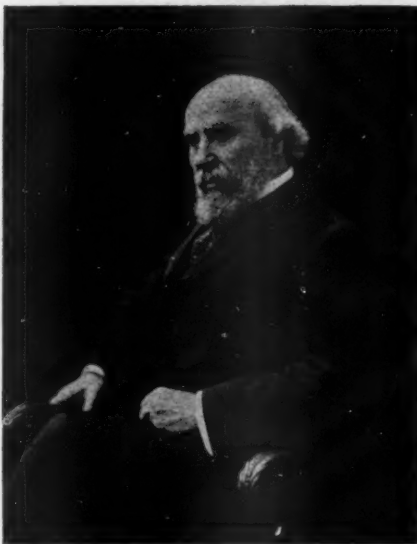
their opportunity. The Amsterdam owners of the road's mortgages, discouraged at the situation, readily parted with their securities. Hill changed the name of the road to the St. Paul, Minneapolis and Manitoba and made it the beginning of the Great Northern system, a property that today controls 5,888 miles of road.

After the election of 1900 had settled permanently the free silver controversy, and the stock market had started upon the most remarkable upward movement in the entire history of Wall street, the leader of prices was the Chicago, Burlington and Quincy. Steadily the price of "Burlington" mounted till it became evident to the most casual observer that something was going on beneath the surface. It was already known that the Northern Pacific was controlled by Mr. Hill and the house of Morgan. The rumor gained headway that these interests were buying Burlington to unite it with the Northern Pacific and the Great Northern; a report that later was officially confirmed.

Important results followed. A new power had arisen in Union Pacific in the person of E. H. Harriman. This man was a director in the Illinois Central and had steadily increased his influence in that property. When the Chicago and Alton was sold it was he who readjusted its finances. For several years the public had been accustomed to consider the Union Pacific as a Vanderbilt road, not that the Vanderbilts were directly represented on the directorate, but that some of their associates of the Chicago and Northwestern were there in power. C. P. Huntington, whose genius had built up the Southern Pacific, died, and to the astonishment of the public, that property fell to the Union Pacific. Then the facts were made manifest that, not the Vanderbilts, but Harriman and the banking house of Kuhn, Loeb and Company were masters of the Union Pacific property.

The new Burlington deal was a sudden blow at the growing ambitions of Harriman interests. The three Hill roads parallel the Union Pacific at nearly every important

point, and this strong rivalry might mean ruin. It was too late to buy the Burlington out of the Hill control, so these shrewd men did better by turning the flank of the enemy. Carefully their plans were laid, all the more promising because the lynx-eyed Morgan was in Europe, and before the Hill people began to suspect the trap it



JAMES J. HILL

Copyright, Pach Bros., N. Y.

was sprung. The Northern Pacific controlled the Burlington, but the ownership of the Northern Pacific itself was claimed by the Harriman interests.

The ball set rolling could not be stopped. More than the entire capital stock of the Northern Pacific had been sold to the two contending interests and neither dared let go of a share lest the other gain the advantage. The result was the famous Northern Pacific corner, and a full thousand dollars a share was paid by some unfortunate "shorts" before a truce was called. Forced by the necessities of the situation, which threatened a panic of fatal consequences, the two antagonists agreed to adjust their differences by each taking partial representation on the Northern Pacific directory. The "community of interest" idea, thus

put in jeopardy by this battle among giants, again ruled the railroad world.

The next stage of development is yet in progress. The experience of the Northern Pacific taught the railroad financiers that a way must be found permanently to harmon-



GEORGE J. GOULD

ize the various conflicting interests. The method chosen was a holding company that should control the securities of the various systems to be operated in common. The Northern Securities Company was organized to take over control of the Northern Pacific, the Great Northern and the Burlington. A majority of the capital stock of the three systems was transferred to this controlling company, and everything was in readiness to continue the absorbing process in other fields, when unlooked-for trouble arose.

President Roosevelt believed the Northern Securities Company to be in plain violation of the national anti-trust law. With the whole machinery of government behind him this "unsafe" man called a halt upon the kings of finance and they obeyed. Recently the federal supreme court has decided the president to be in the right and that the Northern Securities Company

must give up control. What other method will be found to meet the new conditions remains to be seen.

What has been accomplished thus far in railroad combinations? A full answer presents some difficulties. It is easy to indicate the leading systems. But when groupings of these systems are attempted there is room for difference of opinion. The real lines of fusion are not paraded before the public and can be judged only by common report and by certain harmonies of results.

The public cannot peer into directors' rooms to learn the secrets of control. Even officers and directors themselves are sometimes in the dark, as was made evident during the recent Northern Pacific convulsion. The accompanying tabulation shows the present progress of groupings of systems so far as belongs to public knowledge. It should be remembered, however, that these several groups are not necessarily, nor even probably, antagonistic. They are rather intertwining circles of influence and control, all being irresistibly drawn toward a common center.

SUMMARY OF RAILROAD GROUPS

	MILES
Morgan.....	26,393
Vanderbilt	20,520
Vanderbilt-Morgan	7,877

Total Morgan	54,790
Pennsylvania	16,675
Pennsylvania-Vanderbilt	4,746

Total "Morgan"	76,211
Harriman-Hill-Morgan	20,187
Harriman	23,051

1. Total Harriman-Morgan.....	119,449
2. Rock Island	17,591
3. Gould	16,527
4. Atchison	8,615
5. St. Paul.....	6,682
6. Minneapolis St. Louis	3,118
7. Missouri, Kansas & Texas	3,005
8. Pere Marquette.....	2,351
9. Chicago Great Western	1,464
10. Wisconsin Central.....	1,043

Aggregate179,845

The lines directly controlled by Mr. Morgan are the Southern (including the Mobile and Ohio 874 miles) 9,302 miles; the Atlantic Coast line (including the Louisville and Nashville 6,133 miles) 10,703 miles; Central of Georgia 1,877 miles; Chicago, Indianapolis and Louisville 556 miles; the Lehigh Valley 1,399, and the Erie 2,556 miles.

The Vanderbilt group includes the New York Central (with Lake Shore 1,411, Michigan Central 1,653, "Big Four" 2,235, "Nickel Plate" 523, and the Lake Erie and Western 725 miles) total 11,079 miles; also Chicago and Northwestern 8,971 miles.

Vanderbilt-Morgan lines are the Delaware, Lackawanna and Western 824 miles, Delaware and Hudson 966, New York, New Haven and Hartford 2,037, New York, Ontario and Western 549, Boston and Maine 3,298, and the Pittsburg; Bessemer and Lake Erie 203 miles.

The Pennsylvania group includes the Pennsylvania system 10,556 miles, the Baltimore and Ohio 4,397, and the Norfolk and Western 1,722 miles.

The Pennsylvania-Vanderbilt-Morgan lines are the Chesapeake and Ohio 1,641

The Harriman syndicate group are the Illinois Central 5,463 miles, Chicago and Alton 915, Chicago Terminal Transfer 108, Kansas City Southern 839, Union Pacific 6,105, Southern Pacific 9,621 miles.

The Rock Island group includes the Rock



COLLIS P. HUNTINGTON



E. H. HARRIMAN

miles, the Reading 2,145 and Hocking Valley 960 miles.

Harriman-Hill-Morgan roads are the Great Northern 5,888 miles, Northern Pacific 5,976 and the Burlington 8,323 miles.

Island 7,298 miles, St. Louis and San Francisco 5,663, Chicago and Eastern Illinois 752, Evansville and Terre Haute 331, lines in Texas 922, and Seaboard Air Line, 2,625.

The Gould group includes the Missouri Pacific 6,006, Texas and Pacific 1,973, Denver and Rio Grande 2,460, St. Louis Southwestern 1,511, International and Great Northern 1,130, Wabash 2,483, Wheeling and Lake Erie 529, West Virginia Central and Pittsburg 177, Western Maryland 258 miles.

The summary of the table presents a startling array of facts. The Vanderbilt roads alone comprise 20,520 miles. Morgan interests control 26,393 miles. In addition there are 7,877 miles under the two interests, thus making a total of 54,790 miles of railroad practically under the sway of the house of Morgan.

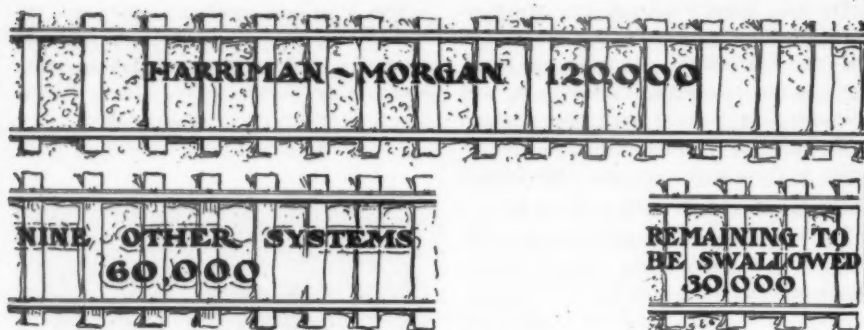


DIAGRAM OF RAILROAD GROUPS

The Pennsylvania lines, operated in entire harmony with these systems, aggregate 16,675. There are also 4,746 miles of lines controlled by the Pennsylvania and the Vanderbilt-Morgan interests together. Thus there are 76,211 miles of railroad administered by common interests which for convenience may be labeled "Morgan."

In the West the Northern Pacific group (including the Great Northern and the Burlington) comprise 20,187 miles. With these should be joined the 15,726 miles of Harriman lines of the Union Pacific and 7,325 other Harriman lines. Here then are, all told, 119,449 miles of railroad that, for convenience, may be represented in the two men, Harriman and Morgan. These roads comprise fifty-seven per cent of the entire mileage of the country. Their securities aggregate over \$7,000,000,000, and their gross annual receipts are above \$1,000,000,000.

Besides these Harriman-Morgan systems there are four other groups of large importance. These are the Rock Island group of 17,591 miles, the Gould group 16,527 miles, the Atchison system 8,615 miles and the St. Paul 6,682 miles. Yet below these are five other systems of from 1,000 to above 3,000 miles each, the five aggregating 10,981 miles. Altogether these various systems of roads, including the Harriman-Morgan group, comprise 179,845 miles of railroad, or six-sevenths of all the mileage of the nation.

With already two-thirds of this tremendous power in the hands of the Harriman-

Morgan group how long will it be before the other nine interests come into the same harmony? Many believe that time already at hand. The Gould and the Pennsylvania interests may quarrel a little longer over an eastern outlet for the Wabash, but they have too many common interests to permit an extended warfare. The Northern Pacific battle taught its lesson of caution. Future differences, if differences there be, will be decided behind the closed doors of Wall street's mighty banking houses.

And when these interests have all come together, and the scores of smaller interests have been absorbed, what then? Possibly the gigantic combine will crumble of its own weight, as did many of the railroad systems so elaborately built up twenty years ago. Perhaps the consolidating and strengthening process will be continued until the structure no longer depends for safety upon the continuance of the lives or good will of a few men, but finds some legal way to take on the immortality of the corporation, becoming thus a gigantic, self-confessed trust.

But what of the public whose interests the railroads are designed primarily to serve? Will the people stand and quietly watch a few railroad kings apportion among themselves the public heritage? Much depends upon how these leaders administer their trust. The great American people have learned the lesson of the economies of gigantic operations, but they insist on receiving a fair share of those profits. If

the railroad kings are properly regardful of these public rights they may be permitted to perfect their plans. Otherwise will go forth the "Thou shalt not" of congress, and the last state of the people's highways may be worse than the first.

Then, too, there are many earnest thinkers who see awful menace to American liberties in the possession by a few men, however wise, of the control of \$12,500,000,000 of the nation's productive wealth and the monopoly of her inland communication. The alternative is that the government take over the roads and run them in the interest of all the people. Better a more poorly

managed property, they declare, better an enormous extension of the spoils system, than that the hands now threatening shall close over the throats of the people with a grip that, once tightened, no after struggle may loosen.

The consolidating process is going rapidly forward and the decision cannot be long delayed. It is but a part of the larger trust problem everywhere pressing. The wisdom of the present may not see the remedy, but somehow we have faith that a people who have built up this magnificent civilization of the new world, will not be found wanting when the crucial time arrives.

THE MAN IN THE TOWER

BY S. E. KISER

(Reprinted by permission from the author's "Ballads of the Busy Days.")

Beside the track there's a narrow tower
Where some one watches away,
And a thousand lives he guards each hour
Faithfully day by day;
The man who toils and the millionaire
And the lisping child he has in his care,
And the crowded trains rush to and fro
And the people come and the people go
With never a thought of him watching there!

Beside the track in his narrow tower
He guards when the skies are blue,
And he peers away through the blinding shower
Keeping the fateful signals true;
And the man who has more than his rightful share,
And the man who has dreams of joy somewhere
And the man who laughs and the man who sighs
And the maid with the love-light in her eyes
Put their lives in his hands all unaware.

Beside the track in his narrow tower,
Poor, unknown, unsung is he
Who holds in his hands a greater power
Than an admiral of the sea!
And the man who is bent by a weight of care
And the man who has sighted a goal somewhere,
And the men who rule in temples of trade,
And the mother at home, and the blissful maid,
Do they think of the debts that they owe him there?

Railroad Oddities

BY L. E. TAYLOR



OF 2,037 railroads listed in the report of the Interstate Commerce Commission more than 1,700, or nearly eighty-five per cent, are less than one hundred miles long. Several hundred of these have less than twenty-five miles of trackage. Many are private roads, but most are subsidiary to some other line. As an illustration of the number of roads which may be controlled by one company, the New York Central and Hudson River Railroad may be cited. This road has nearly ninety subsidiary roads which operate under lease, rental, or some other form of control. The following is an example of the way roads are leased and sub-leased: The Youghiogheny Northern Railroad Company leases its line to the Pittsburg, McKeesport and Youghiogheny Railroad Company. The latter's line is rented to the Pittsburg and Lake Erie Railroad Company, whose line is under the control of the Lake Shore and Michigan Southern, which in turn is controlled by the New York Central and Hudson River Railroad Company.

The terms under which roads are leased vary surprisingly: Some leases may be terminated at any time on thirty days' notice, others confer absolute perpetual control. Some roads are leased on a money rental payable in cash; some receive a certain percentage on their stock; some are given a portion of the earnings; and others are given improvements and valuable considerations of various kinds.

OWNERSHIP AND CONTROL

About ten per cent of the total number of railroads are private roads which do not even pretend to act as general public carriers. Thirty-five per cent are subsidiary, non-operating roads—that is, roads which are leased and operated by other railway companies. Twelve per cent, while operating their own lines, are controlled in some way by other companies. Forty per cent

are absolutely independent operating lines; and the remaining three per cent are not in operation.

The two thousand railroad lines vary in importance from the private logging road of some lumber company operating but a mile or two of narrow-gauge track equipped with a superannuated locomotive and a few cars to the great trunk line which owns thousands of miles of track supplied with the finest mechanical equipment and rolling stock that American invention and ingenuity can devise.

There are seventeen railroad companies each of which owns more than one thousand miles of track; and there are twenty companies each of which operates more than one thousand miles of track. Several companies operate over a great extent of territory, but own a comparatively small amount of trackage. One of these is the New York Central, which owns but 810 miles of track, though it operates more than four times that amount. The Great Northern Railway Company owns not a foot of track, but operates over a trackage amounting to 4,551 miles. On the other hand, the St. Paul, Minneapolis and Manitoba Railway Company, owning 3,799 miles, does not operate a mile, all its trackage being under the control of the Great Northern.

A RAILROAD OWNED BY A MUNICIPALITY

In the United States there is but one railroad of considerable length built and owned by a municipality. This is the Cincinnati Southern, the property of the city of Cincinnati. Although the public-spirited citizens of Cincinnati had discussed the project for many years, it was not until 1869 that the Ohio legislature passed a bill enabling the city to finance the scheme. On the 26th of June, 1869, an election was held at which the voters of Cincinnati by an overwhelming majority decided to construct a railroad from Cincinnati to Chattanooga,

giving an outlet to the south. It was more than four years, however, before construction actually began; ten years before the first through train passed over the road, and instead of costing less than \$10,000,000—the original estimate—\$18,300,000 was expended before the line was completed. For years the rental was insufficient to pay interest charges, and in 1901 the approximate cost to the city had been \$30,700,000. In 1881 the Cincinnati Southern Railway was leased to the Cincinnati, New Orleans and Texas Pacific Railway Company for twenty-five years, the cash rental gradually increasing from \$800,000 per annum for the first five years to \$1,250,000 per annum for the last five years. In 1901 the voters of the city ratified the terms of an agreement made by the trustees of the road, whereby the lease was extended for a term of sixty years from October 12, 1906, the annual rental for the first twenty years to be \$1,050,000, for the second twenty years \$1,100,000 and for the last twenty years \$1,200,000. The agreement also provided for the issuance of bonds for terminal improvements in Cincinnati. The lessee agrees to pay the interest on these bonds, and also \$25,000 a year as a sinking fund for their redemption.

LONG AND SHORT ROADS

The longest railroad in the United States is the Chicago, Burlington and Quincy, which owns 7,794 miles of track, and operates 7,971 miles. Its nearest competitor, in respect to length, is the Northern Pacific Railway, with 5,519 miles of trackage.

Many Americans are so accustomed to travel long distances on a single railway or system of railways that they pay little heed to short roads. Yet there are many roads owning but eight or ten miles of track which are operated as seriously as a great trunk line. The shortest railroad listed in the report of the Interstate Commerce Commission is the Buffalo, Thousand Islands and Portland Railroad, a part of the New York Central system. This road is three one-hundredths of a mile long—about one hun-

dred and fifty feet. The track for this line requires about ten rails; and a locomotive, tender and two or three cars would fill it from end to end.

Another short line is that owned by the Trenton Delaware Bridge Company. It is more nearly a trunk line than the Buffalo, Thousand Islands and Portland, being about a thousand feet long—nineteen one-hundredths of a mile, to be exact. This road is controlled by the Pennsylvania Railroad Company, being operated under a lease dated June 20, 1877, for 993 years, 5 months and 10 days. Though the road is short, it should pay its owners good dividends, for the annual rental is \$32,000.

Coming to independent roads, it will not do to pass unnoticed the line of the Marine Railway Company, owned and operated by the Manhattan Beach Hotel and Land Company. This road is forty-four hundredths of a mile in length. It is operated only three or four months each year, for when the cold, stormy days of autumn arrive the track is taken up and carefully stowed away for the winter, to be brought out for use only when the warm summer days return.

ROADS OF SPECIAL TYPES

Among other roads of a peculiar or special type is that up Mount Washington, that running to Lick Observatory on Mount Lowe, and the Mill Valley and Mount Tamalpais Scenic Railway. The Mount Washington Railway is three and one-half miles long. It is a cog-wheel road, and is operated only in the summer. The Mill Valley and Mount Tamalpais Scenic Railway is eight and one-fifth miles long, its terminals being Mill Valley and Mount Tamalpais, about twelve miles from San Francisco, and it has the somewhat doubtful distinction of being the world's crookedest railroad, in proportion to its length. It differs from most mountain roads in that it is not of the cog-wheel type. The locomotive is a special "marine geared" type designed to overcome heavy grades. Between the terminals of the road there are

281 curves, many of them very sharp. The longest piece of straight track measures 413 feet. In spite of its many curves and heavy grades, however, no serious accident has occurred in the eight years since the road was opened to traffic.

SOME COMPARATIVE FIGURES

Some extremely curious comparisons of

railway capital, annual income and expenditures, are shown in the following table:

Road	Capital	Income	Expenditures
Pennsylvania Railroad	\$312,333,690	\$105,997,482	\$101,563,505
Calumet & Western	410,000	315	700
Baltimore & Ohio	360,292,437	53,468,169	46,947,223
Collins & Reidsville	80,000	6,117	4,605
New York Central	325,691,256	75,806,558	67,789,841
Lawrenceville Br. R. R.	75,000	4,934	4,473

Railroad Trade Journalism

BY FRANK CHAPIN BRAY

HAVE you ever realized that there are nearly forty periodicals in the United States which are devoted exclusively to the special interests of the Great American Railroad Industry? There are half as many more regularly published monthly railroad guides, but these are not included in the present survey, nor are the regularly conducted railroad departments of the leading dailies under consideration here. The railroad trade journals as a class represent what one might call internal in contrast to external railroad publicity, although the dividing line is not always distinctly marked. The public is so familiar with glittering-generalities about the immensity of the railroad industry that it takes an examination of a collection of these trade journals to give a new and more definite impression of its size.

Most of the railroad trade journals are monthlies. The latest available list shows that eight are published in New York City, six in Chicago, four in Cleveland, three in St. Louis and three in Philadelphia, single publications being issued in San Francisco, Atlanta, Indianapolis, Cedar Rapids, Iowa, Kansas City, Mo., Newark, Buffalo, Cincinnati, Toledo, Pittsburg and Scranton. A combined circulation of about 362,000 copies is claimed for them. Naturally the official organs of employees' organizations,

trainmen, locomotive engineers, firemen, conductors, telegraphers, etc., appeal to the largest numbers, and circulation ranges from a maximum of about 52,700 down to a few thousands for those appealing to smaller groups of managers, traffic men, master mechanics etc.

The success of a few weeklies that cover and digest the news of the railroad industry as a whole, is strikingly denoted by the character and amount of advertising carried, which seems to exhibit almost every conceivable product or process connected with railroading.

Illustrations accompanying this article give graphic reproductions of titles and covers of many of these publications, representing at a glance the diversity and scope of the field they occupy. There is the 104 page *Continental Traveler* from which one may figure out the details of a trip around the world or to the ends of the earth as his purse or imagination will permit. There is the 48 page (*Collier's* size) *Railroad Gazette*, a weekly, where one may find the pith of the news of railroad legislation, management, construction, etc., and note with amazement the advertisements of more than four hundred separate kinds of claims for railroad business. There is the 52 page *Railway Master Mechanic* "devoted to the interests of railway motive power, car equipment, shops, machinery and supplies,"

elaborately illustrated, with a "Railroad Paint Shop" department (official organ of the Master Car and Locomotive Painter's Association) and a grist of such topics as "The Trend of Locomotive Proportions," "100,000 lbs. Capacity Coal Cars," "Railroad Shop Tools," "Shop Improvements of the Chicago, Milwaukee and St. Paul Railway," etc. There is the 386 page *Official Railway Equipment Register* whose title-page has the legend:

"A Monthly Magazine, devoted to the Consideration of Topics of Interest to Railroad Officials, more particularly Questions of Transportation Economies, Car Handling and other Subjects of Special Importance to the Transportation Department. Containing official information descriptive of Equipment such as Ownership, Marks, Capacity, Dimensions with Notices of Changes from Month to Month, etc., being the Medium through which Official Instructions are Issued, concerning the Rendering of Reports and the Settlement of Accounts pertaining to Car Service and Car Repairs, including Registration of Rolling Stock Equipment of the Railways and Car Companies of North America. Issued by Authority of the Railways of the United States, Canada and Mexico."

The tabulated information in the *Official Register* may be Greek to the general public, but the publication is interesting from the standpoint of this article. The four publications just mentioned indicate the wide variety of interests served by the railroad trade journals.

The mammoth monthly reference journal last named costs \$5.00 a year. The ruling price for the railroad weeklies is \$4.00 per year. The price of some of the monthlies is \$2.00, others \$1.50 but the majority sell for the popular price of \$1.00 a year. The amount of reading matter printed in the monthlies is often larger than that of the popular magazines displayed on the news stands. Besides this a feature of the official organs of different railroad employees' organizations takes the form of closely printed pages of "official directory" ranging from six in the *Railroad Telegrapher* to twenty in the *Railroad Trainmen's Journal* and the *Locomotive Engi-*

neer's Monthly Journal. From such lists one gets another conception of the army of persons dependent upon railroad employment below those who are classed as railroad officials. In this connection mention of a quarterly publication called *The Pocket List of Railroad Officials* is pertinent, for this quarterly contains, among other things, an alphabetical list of officials of North American railroad companies, transportation companies and car lines, express companies, telegraph companies, national and state railroad commissioners and associations of railroad officers, one thousand nine hundred and five in number.

Among "official organs" the following may be listed: *Advance Advocate*, International Brotherhood of Maintenance-of-Way Employees; Brotherhood of *Locomotive Firemen's Magazine*; *Railway Carmen's Journal*, Brotherhood Railway Carmen of America; Brotherhood of *Locomotive Engineers' Monthly Journal*; *Railroad Telegrapher*, Order of Railroad Telegraphers; *Railway Conductor*, Order of Railway Conductors; *Railroad Trainmen's Journal*, Brotherhood of Railroad Trainmen; *Journal of the Switchmen's Union* of North America; *Railway Journal*, National Association of Traveling Freight Agents, National Association of Railway Agents, National Railroad Master Blacksmith's Association and International Railway Master Boiler Maker's Association. Several publications catering to special services or organizations do not label themselves as "official organs." *The Express Gazette*, for example, calls itself "official journal of the express service." The *Railway Employees Journal* has the subheading "the only monthly magazine published in the interests of ALL railway employees," and gives news and official notices of the United Brotherhood of Railway Employees. *The Railway Mail* contains similar material regarding the National Association of Railway Postal Clerks. The *International Railway Journal* has an official department of the International Association of Ticket Agents. Titles of other periodicals indi-

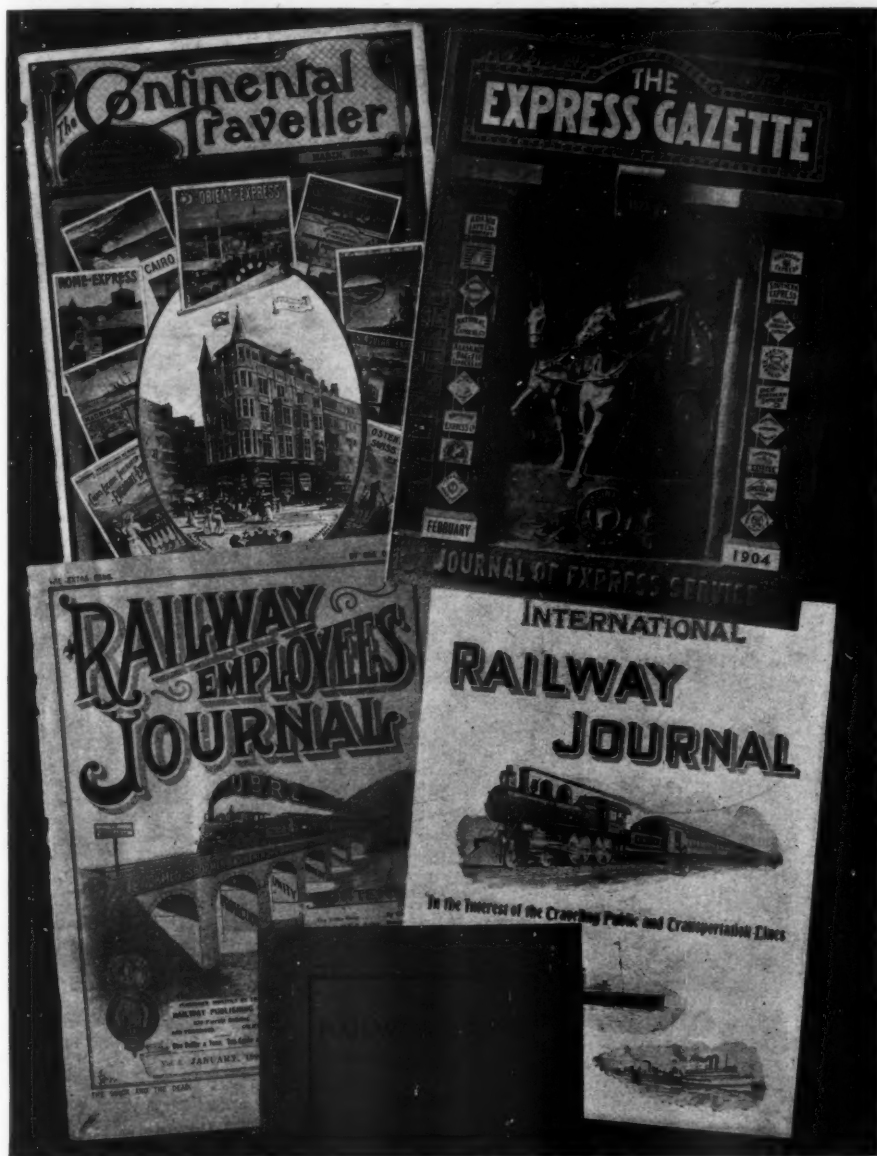


FACSIMILE TITLES OF RAILROAD TRADE JOURNALS

cate special services, *Train Dispatchers' Bulletin*, *Roadmaster and Foreman*, *Railway Master Mechanic*, *Railway and Locomotive Engineering*, etc.

In the Brotherhood magazines there are official and membership correspondence departments, woman's auxiliary departments, benefit association news, technical or industrial departments, special articles dealing with phases of each craft, usually editorials, and popular articles of the home magazine type. These magazines make a

very good impression. They are well printed, interesting, carry many illustrations and show good advertising patronage. In the advertising one notes in particular such products as overalls, gloves, watches, technical publications, typewriters, artificial limbs, etc. Taken at random these titles of articles are suggestive of character and contents: "Recent Railway Disasters," "Brotherhood Libraries," "The Old Dispatcher's Story," "Round-house Talks," "The Single Track Railroad of Ireland,"



FACSIMILE COVERS OF RAILROAD TRADE JOURNALS

"Opposition to the Anti-Injunction Bill," "Only a Switchman," "Legal Decision of Interest to Railroad Men," "Good News from Government Roads," "A Magic Port on Mississippi's Coast."

The engineering publications are pro-

fusely illustrated as their technical character demands. Here are a few of the titles of articles in single issues of *The American Engineer and Railroad Journal* and *The Railway and Engineering Review*:

Indicator Tests of Large Tandem Com-



FACSIMILE COVERS OF RAILROAD TRADE JOURNALS

pound Locomotive, A., T. & S. F.; Railroad Shop Management; Shop Schedule for Locomotive Repairs, C. & N. W.; Extensive Water-Softening Installation, IV, P. & L. E.; Machine Tool Progress, Feeds and Drives; Water Softening on the Union Pacific; Machine Tool Outlook for 1904; American Brakes in Russia; Better Instruction for Apprentices; The "Break-in-Two" Problem—Coupler Failures.

Efficiency of the Railway Telegraph Department; Truss Bridge Erection Without Falsework, Bangor & Aroostook R. R.; The Lubrication of Locomotive Valves and Cylinders; Transportation in the Chicago Tunnels; New Shops of the Terminal Railroad of St. Louis; Derailments of Tenders; Government Competition; Maximum Economical Load for a Locomotive; Water Softening Plants of the C., R. I. & P. Ry.; New Roads and Projects.

The scope of topics presented in the railroad trade weeklies is shown by sample tables of contents:

RAILROAD GAZETTE

Illustrated:—The Rock Island System's New Organization, Stone Highway Bridge Over Connecticut River at Hartford, Steel Cars on the Caledonian Railway of Scotland, Vanderbilt Steel Frame Tank Car, Comparative Tests of Locomotives Using Saturated and Superheated Steam, Atlantic-Type Locomotive for the Great Central of England.

Editorial:—A New England Railroad Historical Note, Electrifying Steam Railroads, Southern Pacific, Editorial Notes, New Publications, Trade Catalogues.

Miscellaneous:—The Cost of Handling Locomotives at Terminals, The Division Superintendent's Work, The Baltimore Fire and the Railroads, Lackawanna & Wyoming Valley, Northern Pacific Timber Lands.

General News:—Technical, The Scrap Heap, Meetings and Announcements, Personal, Elections and Appointments, Locomotive Building, Car Building, Bridge Building, Railroad Construction, General Railroad News.

RAILWAY WORLD

Review of Events in Railway Circles. Distribution of Railway Earnings, Atlantic Coast Line Establishes Pensions, The Pennsylvania's Pension System, Canada's Commission Begins Well, Our Flour and Wheat Export Trade, Trunk Lines Differ on Grain Rates, Grain Rate Cutting in the West, The Railways at the Seat of War, The War to Test Russia's Railroad, Cost of Manchuria's Railway, Famous Trains of the World, An Anti-Pass Bill in Congress, Texas Commission Adds to Tariff Section, Quick Dispatch for Baltimore, Failure of Import and Export Rates, Semaphore at Grade Crossings, Railroad Grants in Guatemala, Prevention of Fires from Engine Sparks.

The Great American Railway Systems—The Pennsylvania.

Legal Department.

Railway Reports Analyzed, Personals, Elections of Officers—Obituary, New Equipment.

Editorial Views on Railway Subjects, Construction Work and New Lines, Editorial Comment.

The Week's Review of Financial Affairs, Range of Prices of Railway Securities, Railway Earnings.

RAILWAY AGE

Editorials:—A Complete Signalling Installation. The Car Beautiful. Lumber Rates and Southern Progress. A Rectangular Engine House. The Right to Route Shipments.

Illustrated Articles:—The Transportation Building, Saint Louis Exposition. Interborough Rapid Transit All-Steel Cars. Square Roundhouses. Automatic Block Signals and Interlocking on the New York and Long Branch Railroad. Locomotive Operation.

Annual Reports of Railways: The Rock Island System and its Constituent parts. Stock Growing Conditions in the West—Suggestions for Relief. Efficiency of the Telegraph Department. Forestry in the Northwest. Anti-Trust Proceedings Pending. The Western Railway Club. Progress on the Sayre Shops of the Lehigh Valley. Iowa Trust Law Unconstitutional as to Railway Demurrage Charges. Railways in Other Lands.

Departments:—Notes and News. Personal Mention. Construction. Financial and Corporate. Equipment and Supplies.

The rise of the railroad journals has been coincident with the evolution of the American railroad, specialization following that policy in the conduct of the industry and the organization of the employees and officials. A number of publications date their establishment in the 50's, 60's and 70's, so that their permanence is not a matter of speculation. This review has not considered the representation of street railways in the trade journal field, a recent development arising from the marvelous growth of electric transportation facilities: The number of these journals at present is about half a dozen. Latterly two popular illustrated magazines not to be strictly classed as trade journals but inaugurated by railroad passenger departments, *The Four-Track News* (New York Central) and *Sunset* (Southern Pacific), have appealed to both the actual and potential traveling public and have created a unique class of their own.

The announcement of twenty-six conventions of national organizations of railway men from March to November of the current year, appearing in the trade journals, suggests once more the multitude of interests involved in modern American railroad'ng.

Locomotive and Car Life

BY ADRIAN W. McCOY



WHAT becomes of all the pins? and What happens after death to the splendid pieces of mechanism called locomotives? are by no means similar questions. Indeed, the theory of metempsychosis may well be applied to all railroad rolling stock. Nearly every piece is saved and put to some use; has assurance of a future existence even as "scrap" for the furnace from which it comes forth as new parts. "Reinferration" the process may be termed, to coin a word for such railroad phenomena.

The modern locomotive costs \$15,000 or \$18,000 according to size and equipment. The passenger locomotives in former days were embellished with extra brass work and trimmings, the bright parts were kept by the fireman in a state of glittering effulgence, and the passenger engine cost more than the freight engine. Nowadays, the trimmings are not put on and the passenger engine, being lighter, costs less than the mammoth freighter.

When the engine goes into commission it is a fine piece of machinery, with power to pull long trains over miles of track, day after day, but with the strenuous work comes the certainty of deterioration and the necessity of constant repairs. When work was lighter, trains not so heavy, and mileage in lower figures, an engine could be expected to live thirty years, but in locomotives the tendency is toward a decrease of longevity, for the management strives to get all the service possible out of them. The age of expectancy is only approximate. Bad water, that is, water bad for the internal economy of boilers and which causes scale, is perhaps the greatest foe to an engine's hope for an honorable old age. A bad water division uses up its motive power far more rapidly than hard work elsewhere. Local conditions on the line largely affect the motive power. A hilly country causes more strain. Then too, housing facilities have

much to do with the life of the engine. If it is possible to keep up with needs in repairs, the power stands a better chance for giving long service. The demand for engines, however, may be so pressing that the least possible repairing that will answer is given, with the result that the locomotives constantly deteriorate and lose in efficiency, until complete overhauling becomes a positive necessity. "A stitch in time saves nine," in railroad as well as in garment repairs.

At one time it was popularly supposed that the passenger engine was subject to the severer strain, but that was before the days of long trains and 100,000 pound cars. The freighter gets the worst of it under existing conditions. The passenger engine, fairly treated, stands a chance of a one-third to one-half longer life, and then prolongs its days on a branch line or in some special service.

Repairs begin almost with the engine's first trip. If these could be eliminated railroading would be simpler for the management: the road is hardly doubled until something has to be done, although for two or three years the expense may be comparatively small. Ordinarily repairs are divided into five classes, as follows:

Class 1, means overhauling costing \$3,500 or more, including a fire box and boiler renewal.

Class 2, repairs costing \$2,500, but no new fire box or large parts.

Class 3, repairs costing from \$500 to \$1,500.

Class 4, repairs costing less than \$100.

The first time an engine goes into the shop it may have run two or three years without much repair charge beyond incidentals, or it may be a "hoodoo" and get into trouble every trip. Under normal conditions the first real repairing would cost about \$1,000 and the second and third overhauling about \$1,500 each. In the twenty years estimated life of an engine the

expenditure for repairs will reach in all probably \$30,000, or about twice the original cost.

The repairs include every imaginable patch or replacement from renewing a broken glass to providing a new boiler or fire box. Scale forms inside and gradually wears the boiler plates thinner, reducing them to frail shell, or if soda ash is used to prevent scale, all the brass taps that can be reached by the soda ash deteriorate rapidly and have to be removed. Thus it will be seen that maintenance of power involves many questions. Everything possible is done to keep the engine in commission, until at last a stage of decrepitude is reached that seems to preclude further repairs. At this point it is a question of scrapping the locomotive or selling it for about \$2,500 to dealers in second-hand equipment, who will repair it for about as much more and sell it to a logging or similar road where it may do service for several more years.

An old locomotive is worth as scrap from \$500 to \$2,500 as the case may be, the difference being due to the availability of the various parts for further use as such parts. When the engine is turned over to the scrappers it presents a disreputable appearance, far removed from that of the days when its first engineer looked it over. Once dignified as "she"; "old kettle" or "mess of junk" are the most respectful epithets applied by those who have to do with its operation. Even in the days of scrapping careful management guards against wastefulness. Steel, brass and iron are taken off separately; everything usable is saved out, and frames, axles and good parts are set aside for further use. What is left goes to the scrap bins and eventually to the foundry or junk dealer.

Changing railroad conditions make it difficult to estimate the life of locomotives, and the same is true of passenger and freight cars. There are many passenger coaches in use today which were built thirty or more years ago and are still in good condition, if not modern in appearance. The old coaches with solid white oak sills were good

ones. Of necessity there have been changes in styles in passenger coaches. The cars that were lightly built twenty-five years ago have no business in the modern heavy trains, and if placed there soon get knocked out. On short branch roads they serve their purpose. The custom now is to build with steel underframing like the Pullmans, so that it is almost impossible to smash them in a wreck.

The box car's life is shortest of all rolling stock, and this is owing largely to the changes in construction. The capacity of cars has increased from 40,000 to 80,000 or 100,000 pounds each, and usage is rougher. The use of the air brake has helped to preserve them, but it is hard service at the best in the present-day long, heavy trains. There are many box cars running, however, which have seen more than twenty-five years of service, and their life might be averaged at twenty years. There is no reason why the steel gondolas should not last thirty years or more, as there is less likelihood of their wearing out. When a box, freight or passenger car serves its time, there is little to be scrapped. The trucks and rods are taken out and the wooden portion is burned or used for some purpose, such as tool houses along the line, stations, sometimes improvised dwellings, in fact for almost anything from an office to a chapel. The trucks under a box freight car are worth seventy-five to one hundred dollars and these with the side rods, are taken out. The box, which is considered to have no scrap value, is burned and whatever small pieces of iron remain are gathered up afterwards.

Car equipment is not always discarded because worn out, but it may be out of style, or of too small capacity. One of the results constantly sought by railroad management is the reduction of hauling expense per ton per mile, and no road thinks nowadays of a box car of less capacity than 60,000 pounds, and 80,000 or 100,000 is preferred. Monster locomotives and long trains of mammoth cars nowadays carry an immensely larger quantity of freight over the road in

less time than formerly. Generally speaking, railroads prefer to sell their old engines and cars if possible and save the expense of scrapping, which naturally is considerable. That is why a number of concerns do a profitable business in old rolling stock, and there is a demand from small railroads or self-contained lines for engines and cars which the trunk lines do not think it profitable to keep in stock.

In all railroad centers a constant watchful warfare is waged against thieves who, many times in organized gangs, plan the removal of all detachable pieces of locomotives or cars. These thieves carry wrenches with them, and if great care is not exercised they will steal brass and other fittings from

locomotives in broad daylight, where they stand. The boldness of some of these attempts is remarkable, and the arrests and convictions which occur from time to time do not suffice to deter these criminals, some of whom are said to be actually in the employ of railroad companies, as silent partners of those who carry away the spoils.

The life of a passenger locomotive may be approximated at twenty-two years; a freight locomotive at fifteen years; a box freight car at twenty years and a passenger coach at twenty-five years. These are the estimates furnished by several railroad departments and superintendents, although in every case they wished the figures considered as approximately correct.

Organizations of Railway Employees

BY STARR CADWALLADER



ACH organization of railway employees holds a separate place in the realm of organized labor. Alliances of every kind have been avoided. Since the rise and fall of the American Railway Union, the brotherhoods have not allowed members to maintain connection with other organizations, even of railway employees. With three exceptions none of the bodies is affiliated with the trade unions. "One of the most deplorable facts in the present status of labor organization in the United States," says John Mitchell, "is the refusal of the railroad brotherhoods to throw in their lot with the other workingmen connected with the trade union movement. . . . By so doing the railroad brotherhoods would not surrender any part of their autonomy or power of self direction. . . . Their adherence to the Federation would mean increased strength to that body and increased power to themselves, and it would bring to an end the policy of aloofness and separatism which

has not yet completely died out in the labor movement." The leaders of the brotherhoods do not look with favor upon such a consolidation of forces. They consider the success of the present policy sufficient warrant for its continuance, and manifest no desire for a change. Apparently a difference in principle is also a factor of some importance in this determination to maintain separate existence. The trade union makes fundamental the absolute and complete prohibition of contract between the employer and the individual men. This is basal to the demand that union members only be employed in the various crafts. Although the railway orders, through chosen officials, make contracts with the railway managers, they have not attempted to force all the men on a system into their organizations. Still another reason operates upon the older orders to hold in check any tendency toward outside entanglements. They have attained a certain prestige of conservatism. While they recognize the fact that the conservatisms

of the present was the radicalism of a few years ago, they are unwilling to surrender any advantage which may be derived from the reputation for it now established.

Employees in almost every branch of the railway service have been organized.* Lodges of the leading organizations are established on all the important systems in the United States and Canada, and some on the systems in Mexico and Central America. The oldest organization is the Brotherhood of Locomotive Engineers, formed at Detroit, Michigan, May 8, 1863, as the Brotherhood of the Footboard. Ninety per cent of the men at present running engines in the United States, Canada and Mexico belong to the brotherhood. It was the first organization to secure recognition from railway officials and to effect a contract between them and their employees. Since 1874, when P. M. Arthur became Grand Chief, the organization has been eminently successful. Mr. Arthur's long term of control, ending with his death July 17, 1903, made a continuous, consistent policy possible. This policy often aroused the antagonism of other labor organizations, but won the approval of business men. Nevertheless the brotherhood has had great influence upon the formation and policy of other combinations of railway employees. The present Grand Chief, W. S. Stone, was chosen in August, 1903, to fill the vacancy caused by the

death of A. B. Youngson who succeeded Mr. Arthur. It is now rumored that a change in policy is to be inaugurated, but



P. M. ARTHUR

Grand Chief Brotherhood of Locomotive Engineers, 1874-1903.

whether a reversal of the established custom of many years will come is doubtful.

The action of the engineers was next followed by the conductors, who formed an organization in 1868. This organization had its inception with the conductors of the Illinois Central Railroad at Amboy, Illinois.

*The following is a list of the existing organizations of railway employees. The figures for membership have been furnished by officials unless otherwise specified.

NAME OF ORGANIZATION	HEADQUARTERS AT	CHIEF OFFICER	MEMBERSHIP
Brotherhood of Locomotive Engineers	Cleveland	W. S. Stone	44,000
Order of Railway Conductors of America	Cedar Rapids, Iowa	E. E. Clark	32,000
Brotherhood of Locomotive Firemen	Peoria, Ill.	J. J. Hannahan	52,000
Brotherhood of Railroad Trainmen	Cleveland	P. H. Morrissey	70,000
Order of Railroad Telegraphers *	St. Louis	H. B. Perham	40,000
International Brotherhood of Maintenance-of-way Employees *	St. Louis	J. T. Wilson	10,000 ^b
International Association of Car Workers *	Chicago	A. T. Fish	5,000 ^b
Brotherhood of Railroad Switchmen	Buffalo	F. T. Hawley	7,000
Brotherhood of Railway Carmen of America	Mena, Ark.	W. H. Ronemus	15,000
National Order of Railway Clerks	Kansas City	J. V. Fisher	15,000
Brotherhood of Railway Freight and Baggage-men	Lancaster, Pa.	R. P. Neil	
United Brotherhood of Railway Employees	San Francisco	George Estes	

^a Affiliated with the American Federation of Labor.

^b Estimate, based on vote in Federation, 1902.

Railway officials opposed this movement, as they did other attempts of the men to organize. In the early days subordinate lodges were obliged to disband on account of this opposition, coupled with the demand that



W. S. STONE

Grand Chief Brotherhood of Locomotive Engineers.

members withdraw or leave the employ of the companies. In 1878, after the labor troubles and riots of 1877, the order was reorganized. The members agreed not to engage in any strike of railway employees. By 1890 the demand of the members for a change had grown too strong to be resisted. "The new policy then inaugurated, and since followed, aims to secure the most favorable condition of employment for the members which can be secured within the limits of right and reason and the pursuit of legitimate, straightforward business methods."*

The benefits secured by the engineers through their brotherhood induced the firemen to attempt to improve their condition in a similar manner. Eleven firemen on

*Recent letter to the writer from Mr. E. E. Clark, Grand Chief Conductor.

the Erie Railroad, who "pledged mutual and enduring friendship," formed a lodge at Port Jervis, New York, December 1, 1873. At first the Brotherhood of Locomotive Firemen was a fraternal order, but as early as 1876 attempts had been made to secure an increase of wages. The strike of 1877, when the chief executive officer was imprisoned and afterward placed under bond for "persuading men to quit work," almost killed the struggling organization. In 1879, following the example of the conductors, the firemen's brotherhood became "an insurance fraternal association," caring for widows and orphans. The railway companies now ceased their opposition. This and the consolidation with the Firemen's Union, which had been effected in 1878, gave an opportunity to increase membership and gain strength. At the convention of 1885 the delegates, dissatisfied with the policy, declared "that the Brotherhood of Locomotive Firemen would henceforth be counted with those who demanded justice and were willing to fight for it if need be." Since that time the brotherhood, although it has engaged in some unsuccessful strikes, and although it lost about eight thousand members through the Pullman strike of 1894, has maintained a respected position. At present it has as many members as there are firemen in the United States and Canada.*

The Brotherhood of Railroad Trainmen includes in its membership those engaged in the train and yard service—conductors,† brakemen, baggagemen and switchmen. This organization with more members than any of the other organizations of railway employees began in 1883. On September 23 of that year a few brakemen of the Delaware and Hudson Railroad, who had formed a lodge three months before, met at Oneonta, New York, enlarged the scope of their undertaking, and adopted the name, Brotherhood of Railroad Brakemen. Although handicapped at the start by inefficient man-

*Recent letter to the writer from Mr. W. S. Carter, Grand Secretary and Treasurer.

†Some conductors retain membership in this organization, to which they belonged before promotion.

agement, the new brotherhood encountered less difficulty from the outside than the older organizations. The times were more favorable for a united effort of workmen. "It has been necessary to indulge in two strikes," says one of the officials, "but today the men have a good contract on each system where the strike occurred and both employer and employee have the highest regard for each other." Since 1885, lodges have been established in Canada as well as in the United States. In 1890, the name of the organization was changed to that which it now bears because the original name did not sufficiently designate the character of the membership. The strength of the trainmen can be measured by the fact that they have contracts with all except four systems in the United States and Canada.*

It is possible, within the limits of this article, to describe but briefly the organizations more recently formed. The Order of Railroad Telegraphers—composed of telegraphers, line repairers, levermen, and interlockers—was organized at Cedar Rapids, Iowa, June 9, 1886. The growth was slow at first, due in part to the isolation of the men. During the last few years, the growth has been more rapid and now eighty per cent of the eligible employees are included. Within the last two years new and revised schedules have been secured on seventy-five lines.† The Brotherhood of Railway Trackmen, which about a year ago became the International Brotherhood of Maintenance-of-way Employees,‡ was organized in 1891. The difficulty of uniting the laborers upon a system of railway is great, but add to this the defection of two-thirds of the membership to the American Railway Union, and it is not surprising that the trackmen's organization was crippled in 1893. It did not recover until 1898. The addition to its ranks of the Canadian trackmen in

the following year gave a new impetus. After a long controversy in 1902, during which the points at issue were submitted to arbitration, an agreement was reached between the organization and the manage-



H. B. PERHAM
Grand Chief Order of Railroad Telegraphers.

ment of the Canadian Pacific Railway. There are now agreements with the maintenance-of-way employees on ten important railway systems. The Brotherhood of Railway Carmen of America—composed of men employed in building, inspecting and repairing cars—is a consolidation, effected at Topeka, Kansas, September 9, 1900, between the Brotherhood of Car Repairers of North America and the Carmen's Mutual Aid Association, both of which were organized in 1888. This organization and the International Association of Car Workers appeal to the same class of employees. The National Order of Railway Clerks was formed in March of this year from the remnants of two older orders. The Brotherhood of Railway Freight and Baggage men also came into existence very recently. The United Brotherhood of Railway Employees is unlike the other organizations

*The total steam railway mileage in the United States in 1902 was 201,000. Of this the contracts of the trainmen covered 195,000 miles.

†Recent letter to the writer from Mr. L. W. Quick, Grand Secretary and Treasurer.

‡Those employed in the track, bridge and building, water supply and fuel departments, and signal and interlocking service.

described, in that it attempts to include in its membership, as did the American Railway Union, all branches of the railway service. Its efforts have been confined to the Pacific coast and Western Canada.



E. E. CLARK
Grand Chief Order of Railway Conductors.

The objects of all these organizations are similar and may be grouped under three heads: (1) protection, (2) education, (3) insurance. The protective features really include all the others but apply more particularly to the adjustment of wages, the fixing of conditions of labor, and the securing of legislation.

Higher and more equitable rates of wages for men in the several branches of railway service have been obtained. The adjustment of wages is an important matter, considering the fact that some southern railway companies have paid as low as fifty-six cents for twelve hours' work. The organizations have performed other services equally important.

They have made possible less hazardous conditions of labor. This was necessary because there seems to be peculiar temptation in the railway business to work men beyond the limit of physical endurance.

The significance of efforts to prevent this can be illustrated by a clause which appears repeatedly in agreements between railway managers and representatives of the men: "After continuous service of sixteen hours or more, trainmen shall be entitled to and allowed eight hours' rest before being called out, except in cases of wrecks or washouts, or similar emergencies." It was also largely through the efforts of the organizations that the use of automatic couplers was required by law.

Efficiency is promoted by the organizations in many ways. They make experience a requisite for membership. They discourage drunkenness by dismissal. They stand for recognition of meritorious service by promotion, and oppose arbitrary discharge without cause. They make the men more familiar with their duties by the publication of technical articles in their journals. In almost every organization the publication of a periodical receives careful attention. It is a means of advertising and also of communication with a widely distributed membership, but it is a means of education as well. While employment agencies in the ordinary sense are not conducted, yet the headquarters of the various brotherhoods are mediums through which the men out of work are directed to suitable places of employment.

Railway employees engaged in extra hazardous occupations cannot secure insurance from the ordinary companies except for small amounts at very high rates. They must therefore care for themselves through the beneficiary departments of their own organizations.*

The Brotherhood of Locomotive Engineers now disburses over \$100,000 per month in insurance. The Order of Railway Conductors has at the present time 28,000 members participating in insurance amounting to \$52,885,000. A somewhat

*The amounts of insurance offered by the principal organizations are Engineers, from \$750 to \$4,500; Conductors, \$1,000, \$2,000, \$3,000; Firemen, \$500, \$1,000, \$1,500, \$2,000, \$3,000; Trainmen, \$500, \$1,000, \$1,350; Telegraphers, \$300, \$500, \$1,000; Maintenance-of-way, \$500, \$1,000.

detailed account of the beneficiary features of the Brotherhood of Railway Trainmen will give a fair idea of the method of the other organizations.* Every member who can pass the required examination must take insurance. The general organization makes no provision for weekly, sick or disability, benefits. The local lodges arrange for such payments and regulate them according to need.† Three classes of insurance are offered, in amounts of \$500, \$1,000 and \$1,350. The amount of the policy is payable either in case of death or of total disability. Total disability means incapacity to perform the usual duties in train or yard service. The premium is \$18 per year for each thousand dollars of insurance. The department is not operated for profit. The policies are small compared with those issued by other fraternal assessment associations, but a double risk is assumed on each holder. Under this plan almost one million dollars a year is paid in claims. From the beginning of the organization in 1884 to April 1, 1904, a total of \$9,220,434.54 has been paid. The department is examined by the state board of insurance, whose reports indicate that it is managed in a commendable way. Aside from these benefits, a home for aged and disabled railway employees, located at Highland Park, Illinois, cares for a limited number of men from various branches of the service. It is supported by local lodges of different organizations which pay \$12 per year for a membership certificate entitling the lodge to send a disabled member to the home in case of need.

The opinion that the leaders of labor organizations can and do order strikes in an arbitrary fashion is prevalent. This, however, is not the case with the railway organizations. The firemen have engaged in strikes on four systems since 1885, the conductors on four since 1890, and the trainmen on two since 1883. While the Pullman strike of 1894 was conducted by the

American Railway Union, many members of the other railway orders were concerned in it. The result of this affair is thus summarized by Mr. Carter of the firemen: "It cost many thousands of railway men their posi-



P. H. MORRISSEY
Grand Chief Brotherhood of Railroad Trainmen.

tions, it brought sorrow to many homes, but it did something else—it put a stop to the wage reductions that had become so popular, it served notice on railway corporations that when conservative labor organizations could or would not fight, radical organizations would, it convinced stockholders that they had permitted their greed to go too far." The steps which are now taken for the adjustment of grievances are much the same in the different organizations and an outline of the method pursued by one will suffice for all.* The aggrieved member is required to make a written statement of his complaint to the division to which he belongs. If approved by a two-thirds vote of the division, it is referred to the local committee, composed of employees of that section of the road, who investigate and endeavor

*Recent information given the writer by Mr. D. L. Cease, editor of the *Trainmen's Journal*.

†The firemen at their biennial conventions distribute a fund of several thousand dollars to disabled members not entitled to insurance.

*Recent information given the writer by Mr. E. E. Clark, Grand Chief Conductor.

to come to an understanding with the local officials. The result of these negotiations is reported back to the division. If unsuccessful, and if the division deems the case meritorious, it is turned over to the general



FRANK T. HAWLEY

Grand Master Brotherhood of Railroad Switchmen.

committee for that system. This committee is made up of representatives from the entire system, one member from each of the subordinate divisions. The grievance is presented by them to the general officers of the road. If no agreement is reached, the general committee may call for the assistance of a general officer of the organization. If the general officer together with the general committee cannot arrive at a settlement with the railway management, then the advisability of a strike may be considered. A complete statement of the situation is furnished each member employed on the system and a sealed ballot is taken. A strike can be ordered only when a two-thirds vote is cast in favor of it. "No officer or committee or board has any authority to order or authorize a strike unless such action is approved by two-thirds of the members affected and who would be involved."

It is self evident that "the strongest unions of the present day are those which are highly centralized." This implies able leadership for its accomplishment. The strong railway organizations have been favored with this kind of leadership. In them have been developed leaders who not only inspire and hold the confidence of the men, but who also win the respect of railway managers. In every instance they have been chosen from the ranks of the employees whom they represent. They are men who believe in keeping an agreement. They are ready to fight for their rights, but are able to distinguish the line where their rights end and the rights of others begin. They can reason and are convinced that under ordinary circumstances a conference, in which both sides are heard, usually brings satisfactory results. P. M. Arthur for thirty years leader of the engineers, E. E. Clark of the conductors, who was a member of the Anthracite Coal Commission of 1902, and F. P. Sargent, formerly head of the firemen, now United States Commissioner of Immigration, represent this type.

The organizations of railway employees have a special claim upon the attention of the public. This claim is not dependent upon the attitude which anyone may hold toward labor organizations as such. The wages men in the railway service receive, the conditions under which they work, the personal habits which they acquire, concern not themselves alone, but the vast multitude who travel by rail. The safety of these travelers depends upon the watchfulness, skill and faithfulness of those who lay rails, inspect cars, tend switches, send messages, man trains, and run engines. A muddled, tired head, or an unsteady hand may wipe out the small margin that often intervenes between life and death. The stand which the organizations have taken for sobriety and uprightness of living, and the effort which they have made to prevent work beyond the point of physical exhaustion, had they done no more, should entitle them to the good will of everyone who rides in a railway coach.

Railroad Temperance Regulations

BY WILLIAM E. JOHNSON



TWENTY-FIVE pound bicycle will carry an average-sized man at a high rate of speed and in comparative safety, yet in the organization of a modern express train from 3,000 to 4,000 pounds train weight per man are required.

In 1829, when Erickson's little two and a half ton locomotive, the "Novelty," ran for a little ways at the rate of thirty miles per hour, a contemporary writer declared that the feat was "the most wonderful exhibition of human daring and human skill that the world has ever known." And there can be no doubt that he voiced the popular wonderment of the time.

Today, four hundred ton express trains thundering along at the rate of seventy-five miles an hour attract no attention whatever. It is in the daily program of traffic and transportation. A four hundred ton train traveling at the rate of seventy-five miles an hour or one hundred feet per second generates a force twice as great as that of a 2,000 pound projectile fired from a one hundred ton gun—an energy far beyond the power of the mind to conceive.

We now have these monster trains, through sunshine and storm, through darkness and light, driving at deadly speed over our more than 200,000 miles of track—eight times enough to belt the earth—guided and checked by block systems, semaphore signals, dispatchers with reins of lightning, and manned by an army of more than a million employees.

The ease with which a misplaced switch, a misread message, a loosened spike, an undelivered telegram, can send one of these mountains of iron and steel crashing into another demands a caution, a clearness of vision and mind unsurpassed by any other calling. From the Grand Central station in New York alone 464 trains dash in or out every day, a train for every three minutes of the twenty-four hours. The pas-

senger enters the Pullman knowing absolutely that his life is in the keeping of others, yet he goes to sleep with precisely the same assurance of safety as if in his own home. In fact accident insurance companies consider "traveling men" as "preferred risks," and insure them against disaster where they refuse altogether or demand higher rates for risks on a farmer or mechanic. Only about one passenger is killed for every 2,000,000 passengers carried, a ratio of improvement over the records of ten years ago by about thirty-three per cent. Yet despite this low rate, the enormous amount of traffic is such that, during the statistical year 1902, 8,588 persons were killed and 64,662 injured. While the ratio of persons killed or injured in proportion to the traffic is constantly decreasing, the volume of traffic is increasing so rapidly that the actual total of killed and wounded steadily increases.

Aside from the hundreds of thousands of dollars in destroyed property, these accidents involve the railways in heavy expenses for damages, litigation and attorney's fees. Without discussing the causes, it will not be disputed that the average citizen is prone to look upon the railways as legitimate prey for schemes that would not be tolerated in dealings with a private citizen, and that the average jury is prone to decide doubtful questions in favor of the plaintiff, widow or cripple.

Each dollar paid out in damages or in loss for wreckage, represents earned money paid out for avoidable purposes. For if there had been no misplaced switch, if there had been no misread message, and if there had been no other "ifs," there would have been no accident and the cost thereof would have gone to swell the dividends, the sole purpose for which the railways are operated.

Dividends are the nerve centers of railway management and whatever affects the

dividends is sure to command immediate and searching attention. The operating management that can show the least proportion of avoidable expenditures, that can develop the promptest and most satisfactory service to its customers, wins the approval at the annual meetings. The first essential to such a service and such a success is clear heads and steady hands in the operating department, and in which the wine glass has no place. This is the basis and reason for the recently developed stringent regulations as to the use of intoxicants which now pertain in all of the railways of the country. Thus the transportation lines have come to be, as the *Railway Age* said a few years ago, "one of the grandest and most effective temperance organizations in existence."

Until about four years ago, this movement was spasmodic and a matter of single action on the part of individual railways. After every accident it was the custom of the superintendents and managers to make microscopic examinations of the causes, the first search being usually directed to learn "if anybody had been drinking." Too frequently it was found that such was the case, and a vociferous warning against drink "to excess" would follow. These "warnings" gradually succumbed to "rules," generally directed against "drink to excess," in turn these gave way to "drinking while on duty," some being more stringent, and a few requiring even total abstinence. This was the situation up to April 12, 1899, when the American Railway Association adopted standard rules one of which read:

"The use of intoxicants by employees while on duty is prohibited. Their habitual use, or the frequenting of places where they are sold, is sufficient cause for dismissal."

This is the standard rule of the association today and as such is in force on practically every railway in the United States. It is in force on approximately 160,000 of the 202,472 miles of main track in the country.

From the standard prohibition of the "habitual use" to absolute prohibition is

merely a matter of striking out one word, and a large number of roads have amended the standard rules in this way. No roads have weakened the standard rules, and all changes made have been in the direction of making them more stringent. Such, for example, is Rule 22 of the Toronto, Hamilton and Buffalo Railway which tartly reads, "The use of intoxicating liquors is forbidden under any circumstances." Rule 19 of the Pittsburg and Lake Erie Railway is even more drastic. It reads:

"The use of intoxicants, visiting saloons, whether on or off duty, gambling or playing cards in or around stations, or upon trains or cars, or in or upon the property of this company, by employees, is strictly prohibited. The violation of this rule will be sufficient cause for discipline or discharge from the service."

Precisely the same language is used by the Bessemer and Lake Erie road.

The very first sentence of the application form used by the Vandalia line is a total abstinence pledge, reading,

"I hereby make application for a situation as and if employed agree to observe all the rules and regulations of the company, to abstain from the use of intoxicating liquors, to avoid saloons and places of low resort, to conduct myself properly whether on or off duty and to perform my duties to the best of my ability."

A similar total abstinence pledge is exacted from applicants by the International and Great Northern.

The Grand Trunk Railway rule reads "intoxication, or the use of intoxicating liquors, will be sufficient cause for dismissal." Absolute prohibition, whether on or off duty, also prevails on the Georgia Southern and Florida Railways, Indiana, Illinois and Iowa Railway, Iowa Central Railway, the New York, Ontario and Western and the New York and Ottawa Railways. Various other roads ask and encourage complete total abstinence without demanding it.

Under date of March 22, 1904, Mr. Arthur Montzheimer, president of the Association of Railway Superintendents of Bridges and Buildings, well explains to the

writer the theory of these stringent regulations. He says:

"Practically all of our members are opposed to the use of intoxicating liquors. We realize that men who use no intoxicants make better, steadier workmen than those who drink intoxicants, even occasionally.

"Further, that a man who does not drink intoxicating liquors can be trusted to attend to the company's business more faithfully than a man who is in the habit of drinking."

The protection of the public from drunken railway employees has generally been left to the railways themselves by the law-making power. Michigan, however, early gave the matter legislative attention. Before the Civil War the legislature of that state enacted a law absolutely prohibiting railways from employing any save total abstainers in their operating departments. This law read:

"No person shall be employed as engineer, train dispatcher, fireman, baggage master, conductor, brakeman, or other servant upon any railroad in any of its operating departments, who uses intoxicating drinks as a beverage."

The penalty for a violation was fixed at \$25, but a proviso was attached rendering it inoperative unless it could be proven that a responsible officer of the company was aware that the employee was not an abstainer. After the war, this proviso was stricken out and the penalty was raised from \$25 to \$500, in which form it continues to the present time.

Michigan law also makes it a misdemeanor for an employee of the operating department of a railway to be intoxicated while on duty.

Last year (1903) the Canadian parliament enacted a most drastic provision of this sort in the Dominion Railway Act of that year. Section 295 of the act reads:

"Every person who is intoxicated while he is in charge of a locomotive engine, or acting as the conductor of a car or train of cars, is guilty of an indictable offense and liable to ten years' imprisonment."

And it was further provided that,

"Every person who sells, gives or barter

any spirituous or intoxicating liquor to or with any servant of or employee of any company while on duty, is liable to summary conviction to a penalty not exceeding fifty dollars, or to imprisonment with or without hard labor for a period not exceeding one month, or to both."

Besides these laws, the operating rules of the Canadian railways are very similar to the rules of railways in the States, though a greater portion of them require absolute total abstinence on or off duty.

The railway development of European countries has forced the consideration of this same question, but of more recent and in less coherent form. A few years ago Otto De Terra, the director of the German government railways, attempted to form all of the government railway employees into a total abstinence organization. With this view, he founded the Vereinigung Enthalt-samer Deutscher Eisenbahner (Union of Temperance Railwaymen) and issued a proclamation inviting all employees to join. De Terra pursued his plan so vigorously and so radically that he gave offense in influential quarters. This led to temporary friction but he continued to pursue the work of his organization more vigorously than ever until it is now a very flourishing concern and encouraged by those who first objected.

The desirability of abstinence in the higher classes of industrial occupations is no new idea. It took deep root in the public mind as far back as 1833, in the early days of the temperance reform in this country. In that year and for a few years preceding, especial attention of temperance leaders was given to the industrial phase of the liquor problem and large numbers of farmers, and factories and transportation concerns discontinued the use of "grog" rations in their enterprises. In 1834, the American Temperance Society reported that there were then about 1,000 American ships ploughing the seas without liquor in any form. The results of the reform were so gratifying that on October 2 of that year, the New York Board of Underwriters at a meeting held in the office of the American Insur-

ance Company of New York City passed the following resolution:

"Resolved, That the different marine insurance companies in the City of New York, will allow a deduction of five per cent on the net premiums which may be taken after this date, on all vessels and on vessels together with outfits, if on whaling and on sealing voyages, terminating without loss, provided the master and mate make affidavit, after the termination of the risk, that no ardent spirits had been drunk on board the vessel by the officers and crew during the voyage or term for which the vessel and outfits were insured."

While the principle was early recognized, but little was done in the direction of demanding abstinence from intoxicants on the part of industrial employees until after the Civil War and especially within the past fifteen years. The American repugnance to even seeming to indicate what his brother should eat or drink was exceedingly strong. The personal liberty of the individual was regarded with almost superstitious sacredness. But the rapidly developing complexity of transportation, the increasing demand for clear heads and steady hands, and especially the fierce competition of the times evolved a new conception of "per-

sonal liberty." It came to be regarded as within the personal rights of travelers to demand that their lives be not placed in the hands of employees addicted to the cup. It came to be regarded as within the rights of an employer to select his helpers from among that class of applicants whose personal habits were not so likely to involve him in the expenses of a disaster arising from a drunken frolic in which he had no part. This, of course, is equivalent to demanding that the employee either "qualify" or resign and engage in some occupation where total abstinence is not demanded.

Deducting the number of officers and employees that do not come under the rules of the operating departments, there are now approximately one million railway employees under this abstinence rule of the American Railway Association or under a rule still more stringent. This list of employees for years has been increasing at the rate of from 75,000 to 100,000 per year. This number of new abstainers is therefore called for each year to fill well paying and permanent positions. The moralist can speculate but can not estimate the power of such an influence in a nation.

THE CHIEF MISSION OF A RAILROAD

BY W. H. TRUESDALE

President Delaware, Lackawanna & Western Railroad Company.

Answering the inquiry in your letter to me, viz., "What do you consider the chief mission of a railroad aside from paying dividends on the money invested?"

I beg to say a railroad company should provide and maintain in efficient condition facilities safe, adequate and, so far as passenger traffic is concerned, comfortable; to promptly, regularly and expeditiously transport over its lines passengers and property at fair and reasonable rates and on terms that shall be equal to all under like conditions.

In order to accomplish its mission as above, it should, in addition to providing and maintaining facilities as outlined, have a capable and intelligent organization of officials and employees, thoroughly schooled and trained to perform their respective duties, whose efficiency shall be maintained by the establishment and enforcement of rules and regulations, supplemented by a discipline that shall be fair and just and at the same time rigidly and impartially enforced among all alike.

I think the foregoing sets forth briefly and yet comprehensively the chief duty or mission of a railroad as I understand it. Of course, the methods by which its mission shall be accomplished as nearly as may be are matters of detail which I will not undertake to cover in this communication, as I judge other contributions to THE CHAUTAUQUAN will deal more or less with such details.

The Railroad Branch of the Y. M. C. A.

BY G. A. WARBURTON



WHETHER considered as an expression of the generally pervading altruistic spirit, a manifestation of the American eagerness for self-help, or as an evidence of the vitality

of the religious forces of our times, the Railroad Branch of the Young Men's Christian Association is deserving of recognition and study. It has been called the largest club of working men in the world. It is doing a welfare work of sufficient size and success to put it in the front rank among such enterprises, and on the railroad it has made a permanent place for itself and is generally regarded as a desirable, and in most cases an indispensable, agency for good. Its status may be seen by the fact that companies controlling eighty per cent of the railroad mileage of the United States support the associations of which there are now 202 with a membership of 65,000, and annual current expenses of \$625,000, of which the companies contributed forty per cent and men sixty per cent. The number of secretaries now employed is 337, and the value of the buildings more than \$1,800,000.

In nearly all parts of the world some kind of good work is being done for railroad employees. In Russia a splendid system of pensions is in operation, and besides coöperative stores there are schools of various grades as well as churches with attendant priests devoted entirely to the use of railway employees and their families. In Germany also pensions are paid to old employees and to the widows and orphans of those deceased. Homes and rest rooms of various kinds are provided with baths, libraries and kitchens, and besides these things a large number of associations composed of railroad men conduct various kinds of welfare work. In Great Britain the Railway Mission is aggressive as an evangelistic

agency and pushes its work in halls, goods sheds, stations, and wherever groups of railroad men are found. It has also extended its activities to South Africa, India and Japan.

The Young Men's Christian Association began its labors among railroad men in 1872 in the city of Cleveland, Ohio, through the agency of an employee who had been discharged for drunkenness but who had recently reformed and entered upon a life of active Christian service. He invited a minister to preach to railroad people in the waiting room of the station, the officers of the companies controlling it having placed it at his disposal. Crowds of people attended, a revival broke out among the men, and as a result of it and the difficulty of managing it, the first branch of the Young Men's Christian Association composed of railroad men was formed. It was not long before a reading room was opened and the organization properly housed in the Union Depot. The first outreach of the new society was to men along the line of the Lake Shore Railroad, and great meetings in round houses, led by delegations of earnest men, were a feature of that period. The secretary was a man of unquenchable zeal, and devoted his time largely to the visitation of the sick, the distribution of religious literature, and the conduct of the evangelistic meetings. One of the earliest friends whose influence was a great aid in those early days was General John H. Devereaux, then the president of the C. C. C. & I. road and a prominent citizen of Cleveland. He afterwards testified that in the strike days of 1877 it was through the influence of the Christian work done among the men in Cleveland that they stood out against riots and disorder.

In 1875 the Cleveland men felt that they must visit other important railroad centers to

tell what had been done and to induce other railroad men to band themselves together and other managers to give their assistance. New York City was one of the first places visited. The Grand Central Depot had become the headquarters of the New York Central system, and the officers of its affiliated lines then, as now, made frequent business visits to it. General Devereaux had spoken of the work in Cleveland to members of the Vanderbilt family. "Young Cornelius," as he was then called, had entered the treasurer's office of the Harlem Railroad as a clerk. He was an active worker in St. Bartholomew's Episcopal Church and had recently become a member of the board of directors of the Young Men's Christian Association of New York. The visitors from Cleveland found him deeply interested in their story, which was a thrilling one, and which was told with all the fervor and fire of zealous advocates of a good cause. Soon a basement room was found for a reading room, and the work was established in the commercial center of the New World. New York assumed a very influential relation to the movement partly on account of its place of leadership in railroad matters but chiefly owing to the devotion of Mr. Vanderbilt to the cause, a devotion that continued up to the time of his death in 1899. The International Committee, of which the late William E. Dodge, Morris K. Jessup and Mr. Vanderbilt were members, secured a secretary in the person of Edwin D. Ingersoll, a natural promoter and one of the original group of Cleveland association leaders, and the work was urged upon the railroad officers of the country and their support enlisted. In one of his early reports Mr. Ingersoll says:

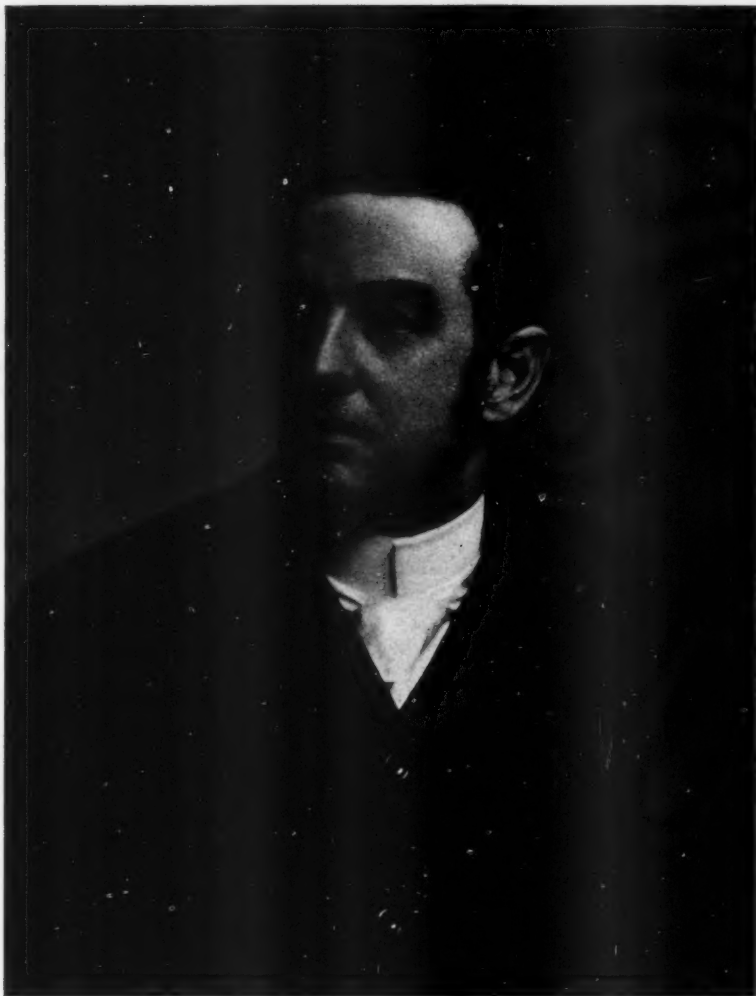
"A library for railroad men was established by officers of the Passumpsic Railroad Company at St. Johnsbury, Vt., in 1850, another by officials of the Vermont Central Railroad Company, at Northfield, Vt., in 1852, and another by Messrs. Peto, Beets and Brassey, contractors, while building the Victoria Bridge at Montreal, in 1854. Many others have since been established throughout the country. A few of them

survive. The great majority of these library organizations are dead, and in many cases nothing can now be found to show that they ever existed. . . . As a rule, they were used only by men of good habits and of some literary taste. There was not sufficient social or other influence connected with them to draw men away from evil resorts; there was no aggressive reformatory force."

The railroad branches supply this reformatory force. As a recent writer has put it, "they introduce the psychological motive of religion."

Mr. John P. Green, first vice-president of the Pennsylvania Railroad, has said: "To accomplish any great work there must be some strong, guiding, impelling principle behind it. . . . We believe that in having the Young Men's Christian Association back of our work we have secured coöperative force that is always pushing to the front, and is making us do this great work not only for ourselves, but for the community and the world which we are trying to serve."

I have given this brief sketch of the beginnings of Railroad Young Men's Christian Association work as a background against which to put the varied activities and recognized successes of these later years. Originating among the men, it was not always understood, and by the intensity of its religious fervor (in which it was merely reflecting the conditions of the period in which it was born) it estranged some. Railroad officials were not generally sympathetic. They doubted its practical value and, when they had been won, many of the men gave but lukewarm support. Gradually the activities of the associations assumed most practical shape. To the reading and lounging room were added the library, evening classes, lectures, baths, rest rooms and dormitories, and later restaurants. Railroad companies were led to invest larger sums of money, to furnish better equipment. At first rooms in the station, over a freight shed, or in a round house, were provided, and the experiment went on with increasing success. One test that has



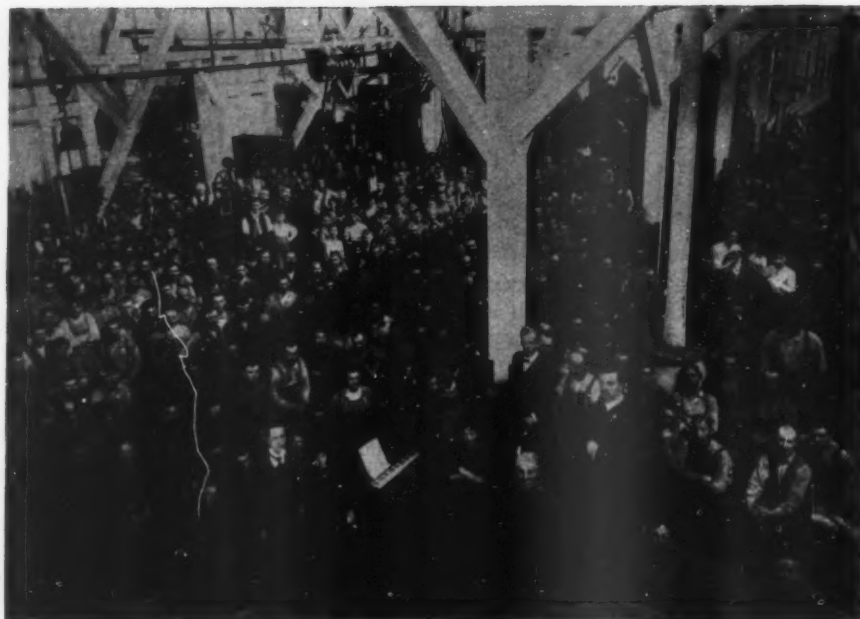
CORNELIUS VANDERBILT

always been applied has been the ability of the association to keep railroad employees out of the saloon, the brothel and the gambling resort. Railroading in the old days attracted a type of men to whom vices of various kinds made a strong appeal. It was a common thing for them to be woefully lacking in good morals. Many were dissolute, and the location of a terminal in a town was considered a calamity because of the undesirable men who would thus be brought into it. It is also true that the

restraints that are around the working man of the same social grade in other employment are lacking in a railroad man's life. His hours are generally irregular. Much of his time must be spent away from home. His labor is exhausting to physical and nervous force to such an extent that the desire for stimulants is stronger in its appeal than it might otherwise be. Yet the nature of his responsibility is such that he must be alert, sober, trustworthy. The rules of the railroads prohibit the use of liquors while on



SOCIAL ROOM, COFFEYVILLE, KANSAS



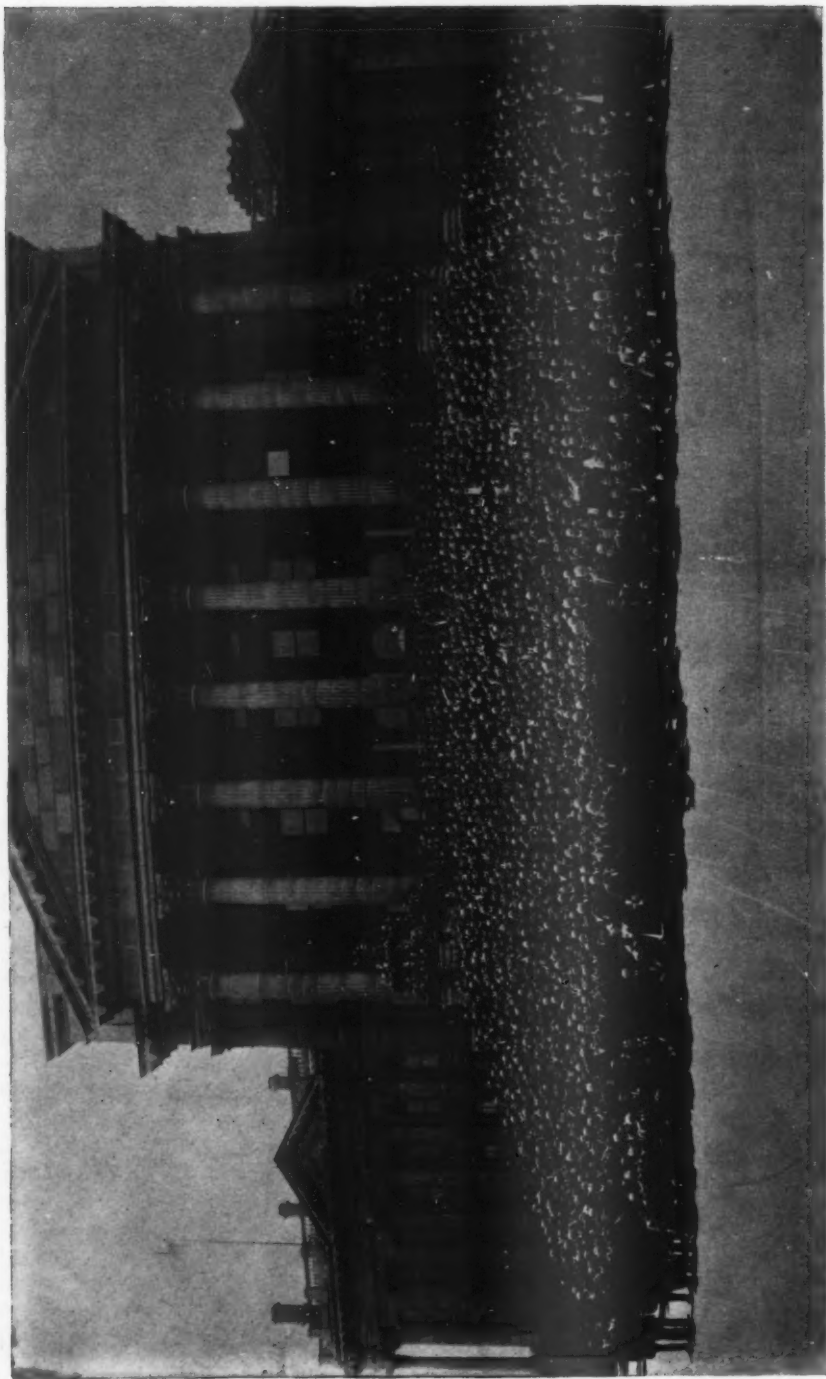
SHOP MEETING AT LOUISVILLE, KENTUCKY



COFFEE ROOM, TOPEKA, KANSAS



SHOP MEETING IN MOBERLY, MISSOURI



DELEGATES TO RAILROAD Y. M. C. A. CONVENTION, TOPEKA, KANSAS, 1903

duty. In fact the railroad employees of the country constitute the largest army of temperance men in the world. The brotherhoods, too, deserve much credit for their attitude on the drink question. But it would be useless to prohibit drinking and then force men to the places where liquor is sold by compelling them to seek their food and rest in the cheap hotels that are always found near terminal stations and yards. It is here that the association serves both railroad officers and railroad men. It competes with the saloon for the patronage of the engineers, firemen, conductors, brakemen and the others, and it offers them all of the needful things for which they must seek.

The social rooms with games of various kinds are as free from unnatural restraint as they can be made. The restraint is one of atmosphere, not of rules. Mirth, sometimes of a boisterous nature, abounds in such places. The "Stove Committee" may meet and talk about how the road should be run, with the confidence of a commuter, and no one will be harmed. The engineer and the fireman from the "head end" may smoke and chat with the men who punch tickets, handle trunks or help the ladies on and off at the platforms of the cars. Profanity and obscenity are tabooed. It is a club. It is better than the saloon and cheaper. There is no gambling, no drinking, but a wholesome, manly enjoyment of those recreative features that bring freshness to the jaded body and new vigor to the weary nerves.

The lunch rooms and restaurants furnish food at cost prices and the patronage of some of them is very large. At Madison avenue, New York, between seven and eight hundred meals are served daily. The dormitories are very popular, and for a dime a member may have a bed with clean linen and be sure to be called in time to go out on his run. The reading rooms and libraries are supplied with current literature and the best books; in some cases traveling libraries are employed, and men at stations on the line are supplied with books by train service. This is a great boon to the solitary station agent who must also serve

as telegraph operator, baggageman, and express messenger, but whose work is miles from the nearest public library. Practical talks upon such subjects as "The Book of Rules," "Locomotive Repairs," "Reports and How to Make Them," as well as evening classes on subjects of value to railroad men, are useful and measurably popular.

In the religious meetings your typical railroad man appears at his best. He has



AIR BRAKE CLASS

L. I. R. R. Branch Y. M. C. A., Long Island City.

slight regard for conventionalities but goes straight to the heart of things in his talk. Railroad phrases are numerous and brighten into vividness speeches that might otherwise be prosaic. The engineer speaks of men who lack "sand," whose "drivers slip," whose "headlight isn't burning." He tells of "throwing her over" and shoving her down into the notch. The conductor declares that there are no sleeping cars on the gospel train but that every passenger travels on a pass! Flashes of wit follow bursts of real pathos. Stolid and self-contained as railroad men appear to the public, they are companionable and brotherly within their own circle. Their sorrows and their joys are shared by their fellows. They do not readily open the doors of their natures to outsiders, but to be a railroader insures a friendly welcome. Big burly men are often child-like in the depth and simplicity of their emotional life. They hate shams and have an unusual power of discrimination in reading men. The conductor

spots the short fare passenger, his place and his future depend to no small degree upon his alertness, memory and tact. Every man must be ready for any emergency. Difficulties are to be overcome and not to stop the train. The man who can only tell why he didn't do a certain thing will soon be crowded out.

The active agency in the extension of the railroad association work has been the International Committee, and in several states strong committees of railroad officials have pushed the work within state lines. There are now seven international railroad secretaries at work. Railroad centers are visited, the men and the companies interested and organizations effected. Nearly all railroad managers now welcome the association's coöperation and the men are easily induced to enter the membership and to work on the various committees. The labor unions are friendly and in many cases their members actively coöperate, though it is always understood that the association has no direct relation to labor questions except as its teachings tend to promote good feeling and its social and other work actually brings employers and employees together and increases mutual respect. This in itself is not a small contribution in these days of gigantic corporations with the number of employees running into the tens of thousands.

This solidification of the association work by means of a central committee is further carried out by great conferences of delegates, the last of which was held at Topeka, Kansas, in April, 1903, and was attended by more than fourteen hundred delegates. President Roosevelt made an address.

The faces of the delegates were a most interesting study. They exhibited intensity, alertness, discrimination, sympathy, firmness, confidence, expectation, in varying degrees. Some showed signs of hard knocks in the battle of life. Firmly set jaws, and eyes that looked out of cavernous depths, indicated natural force and assertiveness. These were men who in the round house, the conductor's room, the switch-

man's shanty, the caboose or the shop, would compel attention. They would be likely to arouse opposition because of their aggressiveness. They never would be "ciphers in the midst of the figures." Each man would count for one. There were faces there that indicated innate refinement, and gentility which was more than a veneer. These men were enjoying the heritage of a gentle mother and of a home life where the sweetest influence prevailed. The chisel of time had only served to bring out the fine lines. If you could trace their pedigree you would discover that, like Timothy of old, they had sprung from a stock which had been sanctified and polished by an affectionate acquaintance with the word of God. Of course there were some men in whom the sensual and brutish were extremely strong. Their faces showed it. Waves of passion which had swept through them had left their mark on lip, and brow, and eye. They had been driven by appetite and showed signs of that devilish master. Yet it was not hard to see in such men unmistakable evidence of a new kingship and of the presence of a mightier power which held the baser man in check.

Among those officers of railroads whose support has been most generous and influential have been Cornelius Vanderbilt, George B. Roberts, Chauncey M. Depew, A. J. Cassatt, M. E. Ingalls, Lucius Tuttle, E. P. Ripley, W. H. Baldwin, Jr., George W. Stevens, E. V. W. Rossiter, W. C. Brown, George J. Gould and W. H. Truesdale. Miss Helen Gould has given large sums of money towards the general work and for buildings and libraries upon the Gould lines.

Students of social progress may well regard such an enterprise hopefully. It furnishes a platform upon which employer and employee may meet and it has in it at least a suggestion as to the way in which religion may be related to the actual life of men and wage-earners be led into a better understanding of Him who was, as Hugh Price Hughes was fond of calling Him, "The Mundane Christ."

The Way Station Agent: Suggesting An Epic

BY J. J. SHANLEY



OR the great American epic we still strive and sigh and pray. Illustrious literati despairingly cry out that the occasion has not yet arisen, the subject is yet undiscovered, which would awaken the inspiration of an American Homer, Virgil, Tasso, Milton or Shakespeare. Paradoxical as it may seem, the occasion is continually present, and we come in daily contact with the subject. He is none other than the humble station agent at an intermediate railroad point: the epitome of all railroad knowledge, the unfailing encyclopedia of general information, the embodiment of the "strenuous life," the concentration of responsibility and personification of total self-effacement. An unswerving fidelity to duty is his morning anthem, his noontime song and his evening hymn late into the night.

The president of our land, the most exalted of all potentates, is relieved of much of his great responsibility by his cabinet, the supreme judiciary, house and senate, governors, State legislatures, the thinking citizen and the conscientious voter; the commanding general of the army has his staff and numerous subordinates down to the tried and true rank and file; the admiral has his captains, cadets, marines, the men behind the guns and the stanch cruisers themselves; the presidents of the mighty steel arteries of traffic have their vice-presidents, general managers, general superintendents, division superintendents, chief dispatchers, train masters, yard masters, train men, down to the last, but not least, the man with the pick and shovel and spike maul. But the agent at a way station, responsible alike for lives and property, bends alone under his onerous burden. He stands for all that is required from station master, agent, chief clerk, bill clerk, baggage master, ticket agent, express agent,

telegraph operator and general factotum.

The station itself is regarded and utilized as a public building; the agent is the chief personage in the immediate community, as well as in the burghs and hamlets contiguous and tributary thereto. He is at once the slave and idol of every man, woman and child for miles around. He is the confidant of all the gossips and is unwillingly cognizant of the dangling skeletons in the rural closets. He is the butt of all the trainmen as well as the subject of complimentary comments at every session of the "Stove Committee." His time, early and late, seven days in the week and every day in the year, is devoted to the company's interests and the welfare of its patrons, with never a thought for himself, as he has no affairs and is known to his children as that man who sleeps part of the night at their house.

He must familiarize himself with the official classification and all its supplements, with all tariffs, freight, passenger and express, local, special and joint; with all divisions and per cents for billing to connecting lines and foreign roads, a task as herculean as the memorizing of Webster's Unabridged. He must note contents and strictly comply with all information contained in general orders, general notices, special notices, circulars, etc., properly file them and eliminate or add to daily as requested.

He is easily recognized, for his characteristics proclaim him a generic species of humanity. His gait is far from being a walk, nor is it yet a run, but a sort of a compromise hurried jog. His eyes assume an apparently vacant stare, since his mental concentration, ever at rigid tension, will not permit of visual distraction, but the habitual smiles which illumine the partial gloom of his countenance are the never-

failing indicators of his suavity, urbanity and affability.

Mentally drop in on him of a morning and follow his routine of daily duties. He arrives at six A. M. and proceeds at once to cut in his instruments with a genial "G-M" to the dispatcher. His next move is to slick things up for the day. Oh, horrors! he discovers that during the night marauders have gained an entrance by forcing a rear window. He has no safe—the money and valuables on hand after the last passenger train of the previous evening he carries with him and will safely guard at the expense of his life—but his tickets are strewn about in promiscuous confusion. These he must count and arrange in numerical and station order. Thus fretfully engaged, he is called to the telegraph table and copies a "bunch" of orders for several trains in both directions. Somebody rushes in saying he has fifty crocks of butter and as many cases of eggs for the express east, due in a few minutes. Besides the billing he must tag and label every piece. Somebody else shouts from the freight-room that he has two or three loads of H. H. (household) goods for which he demands an itemized bill of lading to forward on the first mail. He sells tickets, checks baggage, explains several times when the "eight o'clock train is due," quotes the price of wheat, potatoes and other products to inquiring farmers.

One of the trains has "laid down." The dispatcher gets him again, "busts" all existing orders and fills his table with a fresh lot, some to be signed for and others to be handed on to trains going at full speed. Shippers are bringing in shipments of every description, rates must be looked up and waybills must be made out, with five to seven impression copies. He delivers freight to consignors, runs from desk to table to deliver orders and then realizes that the fast mail is about due. Frantically he rushes to the postoffice for the pouch, and the twitching of his hands and occasional nervous strides to and fro

are the only perceptible evidences of his impatience at the dignified deliberation of "Uncle Sam's" representative. The bag is finally ready; he snatches it, flees as with a fear, and has barely suspended it on the crane when the train goes thundering by.

The morning "local" now pulls up and unloads sufficient to fill an exposition building. Each article must be tallied and checked off by the agent, besides noting with the keenness of a detective the "overs, shorts and damaged." He also sees to loading and checking in of all freight going forward, and reseals all cars which have been opened. The dispatcher again wants him and throwing the armful of waybills on the desk he flies now here, now there and keeps on the jump until the passenger trains, "locals" and three or four through freights have pulled out. He has been undoubtedly "rattled" to a certain extent but his habitual self-restraint saves him from "going up in the air" entirely. Nevertheless with tingling fingers pushed up through his scant locks and cold perspiration on his brow, he wonders if perchance he made a "miscue" in delivering any of his orders.

He answers his "call" once more and receives a W. U. message collect, for a person who lives just on the verge of the mile delivery limit. He asks to be out the required time, and his pace for that mile would arouse envy in a professional sprinter. He finds his man and presents the telegram, naming the charges. The recipient takes it, twirls it over two or three times and asks the agent if he has read it. The latter replies with unperturbed countenance that he merely transcribed it during transmission and the privacy of telegrams is inviolable. Whereupon the person thanks him, saying that he will hand in the change the next time he is down to the station, and the agent returns, intuitively knowing that this forty-three cents will be entered on the loss side of his individual cash account. When he enters the office he hears his call as usual; the dispatcher warmly asks him where in Halifax he has been and how

long he thinks the company will endure having the road tied up to suit his convenience. Another batch of orders follows with the accompanying hustle of signing, grabbing and away.

Next comes a message from the superintendent directing him to proceed at once to a point about two miles distant, where live a couple of people of easy conscience who, a day or two previously, had appropriated several hogs which had escaped slightly injured from a derailed car. He again arranges to be absent. His instructions are to collect at the rate of four and one-half cents per hundred and to arrive as nearly as possible at actual weight; pushing along he evolves a new meaning peculiar to himself from the railroad expression of "being on the hog." When he reaches his destination he finds the hogs already slaughtered and dressed or rather undressed, as there is nothing on them, or in them for that matter. With the cajolery of a Russian and the adroit directness of a Japanese diplomat he comes to a satisfactory understanding with the embryonic

Armours and returns to the station complacently happy.

He locates the trains and says "S. F. D." (stop for dinner) twenty minutes. "Hurry back," is the response. Just think of it, ye epicures, get thee home, dine in the meantime, and hurry back, all in twenty minutes. Through the afternoon and until late into the evening the hours are but a repetition of the foregoing multifarious duties with their attendant vexations, until he finally "cuts out" for the night.

The Way Station Agent may have aspirations for a broader field of action, and as he is usually a man of parts, he may sometimes long for the social enjoyments of a more metropolitan sphere, but he is as much of a fixture as his semaphore, and while wending his way homeward and gazing around upon the limited horizon of his circumscribed environment, only the certainty of duty faithfully performed can cause his heart to throb with jubilant pulsations.

"Let not ambition mock their useful toil,
Their homely joys, and destiny obscure."

The Tzar of the Sleeping Car

BY ARTHUR SULLIVAN HOFFMAN



THE Pullman porter, along with the dude, the mother-in-law and the tramp, has served so long as material for infinite jest that, unconsciously, most of us have accepted the newspaper and comic paper concept of him and refuse to consider him altogether seriously, as we do the carpenter, grocer, lawyer or conductor. Porter—tips; that is as far as most of us get, and, whether we travel little or travel much, the odds are that we know almost nothing of the real life of the czar of the sleeping car.

Not long ago the writer, who is anything but a Sherlock Holmes, entered a crowded street-car, and without the least difficulty

picked out one of the passengers as a Pullman porter. The man was not in uniform, but he was colored, he was immaculately clean and neat from his polished black shoes to his spotless white linen, and he was unobtrusive and yet entirely at his ease. Now all people with these attributes are not porters, nor, alas, are all porters possessed of these attributes, but there was about this man a certain air of cosmopolitanism—a poise that comes only to those that travel the earth and come in daily contact with men and women from all ranks of life—and, withal, the air of one who, in his own sphere, carries both responsibility and authority.

Well, the man was really a porter, an

acquaintance was struck, and the writer accepted an invitation to visit a place in the railway yards where porters congregate both officially and socially. Among others was a veteran who had served his thirty years and is now in charge of the check-room for the yards—a converted baggage car, comfortable and appropriate. It was not by any means the first chat with a Pullman porter off duty, but it was the first with one of such varied experience and extensive retrospect. Best of all, the veteran was also broad enough to skip the usual string of anecdotes and isolated cases and give, instead, an intelligent survey of the field in general.

Roughly speaking, porters are of two kinds—Pullman porters and—porters. The latter find their vocation in diners, chair cars, library cars and so on, but the porter *par excellence* is the Pullman porter of ancient fame and abused reputation. Since the Pullman company absorbed its competitors a few years ago it has been the employer of nearly all sleeping car porters, the exceptions being found on the very few railroads that own their own sleepers (Pullman made) and on private cars.

Except occasionally on private cars, all Pullman porters are colored, probably for the same reason that nearly all policemen are Irish. When cars in which one could actually go to sleep for the night in a real bed were yet a nine days' wonder, things were otherwise and there were white porters in those days. But it was not long before the survival of the fittest, or some other general law by which we are in the habit of accounting for things no one understands, began to assert itself, and eventually established the colored guardian of sleeping travelers in undisputed sway. Today, unless one is fortunate enough to ride on private cars, one meets no white porters.

Nearly all porters are married men, generally with their families settled in the place where the nature of their "runs" gives them the most of their off hours. Fortunately for the traveling public as well as for himself, a porter is, so far as practicable, kept upon the same run. The more familiar he

becomes with the schedule, towns and connections of a given run, the more reason there is for retaining him on it. Most important of all, he learns to know the regular passengers on that trip, their peculiar wants and how best to make them comfortable. The regulars feel more at home on their journey for the personal salutation of the tzar when they board the train.

But what of the fabulous tips? That is just the trouble—most of them are purely fabulous. To the porter himself, the comic paper jokes have all the added bitterness of irony. In the old days, when salaries were lower and most of the emoluments were expected to come from the pockets of the travelers, there was less irony and more fee, but now "the company's" policy is to pay enough to make tips less necessary, if always welcome. To be sure, they still form a very material portion of the month's earnings, but it is no longer only the rich that take sleepers, and familiarity has bred the feeling that the porter is, after all, like the conductor and the brakeman, and is paid by the company for his services. Often a run is finished without a single tip from the few thrifty passengers. A porter may take a party from New York to Mexico City and for all that time receive five or six dollars, or even less. It is a very quickly established principle that a short run is far more lucrative than a long one, for there are more trips in a given time—and people tip by the trip rather than by the length of time and service involved. Very unjust, but like a good many other unjust things, very true. However, the Pullman porter's salary ranges all the way to forty dollars a month, and, all in all, he does not fare at all badly in finances—better than his brethren of the chair car.

Certainly he earns what he gets. Seeing him going easily and quietly about his duties, one hardly realizes how various and exacting these same duties are. The porter is responsible for that car and for the comfort of the people in it. Ventilation, heat, light—each is a problem in itself. For it is not an entirely simple thing to adjust all the

surprising vagaries of steam, heat, weather, draughts, sunlight, lamps, windows and ventilators to the still more surprising vagaries of the passengers under his care. There are screens and cinder shields, pillows, card tables and an infinite number of other comforts and conveniences which he must be ready to furnish at any moment. There are differences to be adjusted between his charges, there are rules of the road and car to be enforced among them; there are all the thousand and one things that any assemblage of the American public can think up when they haven't much else to do to kill time. If he is cornered, he will admit, very delicately (perhaps) that the world would be comparatively simple if there were no women in it. And it is more or less pertinent to this point that on some roads a sleeper has, in addition to the regular porter, a colored maid, or portress, whose sole duty it is to look after the needs and (what means much more) the wants of the women passengers.

Above all, the interior of the car must be kept spotlessly clean—seats, window sills, floor, toilet rooms and appointments, everything. And the cleaning must be done without inconvenience to the passengers—at night, when they are at meals or in the smoker. There are shoes to be shined in the dark watches of the night.

And lucky is the porter whose train leaves at such an hour that he can make up the berths before the passengers begin to reach the station. It is not easy to pull down and push up those berths, nor to turn the mattresses and arrange the curtains and covers all from an awkward position on one side. For all its ingenious mechanism, a berth in its entirety is quite a problem for the housewifely faculties of our friend. Every time a berth is made up it receives, of course, a complete change of linen, which means that a sleeper must carry for the round trip, even on a one-night run, a large supply of sheets and pillow-cases. For such a run the big hampers of clean linen that are delivered to the porter some time before his train pulls out will contain a

hundred sheets and a like number of slips. Such of these as are not put into immediate service are stored, along with, say, one hundred and fifty towels, in one of the three lockers given over to supplies. The other two closets are used, respectively, for the porter's uniform and individual effects, and for supplies of diverse kinds—combs, brushes, soap, tools, and so on.

On the porter's shoulders rests a good deal more responsibility than is commonly realized by those who pass under his charge. The conductor is responsible for the train, the Pullman conductor for several sleepers, but the immediate care of each individual sleeper lies with its porter, and if things go wrong in it, he is held liable by the company. On a one-night run entire responsibility for the car and its occupants generally rests solely upon the porter for the entire journey and he does no sleeping. On longer runs he "spells" the time with the Pullman conductor and gets a turn of about five hours' sleep in his berth at the forward end of the forward coach after he has put his passengers to bed for the night. When he has had his nap, he once more goes on duty and wields the scepter of absolute monarchy in the intervals of answering night-bells, blacking shoes and a dozen other bits of work.

Of his responsibilities when on duty, two weigh especially heavy. The first is the fact that the company, being responsible to the passengers for valuables while they are in bed for the night, in turn holds the porter liable for such losses. While people are up and about they are supposed to be able to look after themselves, but as soon as they surrender themselves to the sleep advertised and sold by the company it becomes the company's duty to take care of them; and the porter is the man hired to do it. Consequently, he keeps his eyes open for mysterious movements of the berth curtains and for any other suspicious incidents or circumstances. If he is circumvented, it is money out of his pocket. Of course, he has an ally, often unknown to him, in the railway detective, and, of course, most pas-

sengers take ordinary precautions, but there are enough crooks on sleepers, as everywhere else, to make the task of protecting property no mere sinecure. It is something of a tribute to his watchfulness that most of the robberies that do occur, take place in the toilet rooms, where the passengers, not the porter, are the ones responsible.

The second nightmare of our friend the tzar is the fact that if he fails to wake a passenger at his destination, his position is forfeit. Such a failure is considered the height of incompetency, and the punishment is correspondingly severe. If a man sleeps past a town in which he has a business engagement, it may very well mean a loss of thousands of dollars. The company dares not allow the risk of such catastrophes: therefore it very naturally insists on short shifts for careless porters. The historic porter who was heavily feed to wake a man for a certain town, and, since the man was hard to rouse and might protest and even resist, was to use force if necessary, probably failed to enjoy the humor of the final situation. It will be remembered that he did have to use force and a lot of it, and that several hours later, while he was still repairing damages to his person, he was paralyzed at seeing the man whom he thought he had thrown off. The man was cursing volubly because the porter had not waked him at his station. The porter stared with bulging eyes, and then burst out: "Fo' de lawd! I wondah who was de man I dun throw off dis train!"

The feeling of responsibility of all kinds is unpleasantly enhanced by the knowledge that in all probability some one of the passengers is a "spotter" employed to keep an eye on the way in which the porter fulfils his various duties. Very rarely does he learn the identity of a spotter, for these

bâtes noirs are legion, their beats may extend from the Atlantic to the Pacific, and their schedules are chiefly remarkable for their irregularities. The same spotter may not be on a given car twice in several months or even longer, but there is always the uncomfortable assurance that one of his fellows is probably on duty in his stead.

And the Chronic Kicker! What better stamping-ground than a sleeping car could the Chronic Kicker have? And the porter is his legitimate prey. There is the one consolation that the powers that be have learned to know the Chronic Kicker at sight and his complaints are doubly discounted. The only really good trait about the Chronic Kicker is that he is easily distinguished.

In general, the relations between the porter and his employers are most amiable and satisfactory. The employed feels that, all in all, he is sufficiently recompensed for his services and is not in the habit of paralyzing travel by going on strikes. Indeed, it is a remarkable fact that there is no porter union. They have their social societies and organizations, but they do not unite for professional purposes further than the promotion of good fellowship and mutual advantage and the insurance benefits that are a feature of most lodges and orders. If the business has its hardships, it has also its advantages—not the least of them being the stability of the *status quo*.

One can no more characterize porters as a class than one can assign invariable qualities to all doctors or masons or to those engaged in any other business or profession, but, take him altogether, the Pullman porter is generally a man who knows his business and a gentleman of the road into whose care it is both safe and comfortable to entrust one's self and one's belongings.



Social Centers For Railroad Men

BY THE EDITOR



HOME-LIKE place to bathe and rest in, a practical social center for railroad men capable of serving the interests of family and neighborhood, a common meeting place for discussion, entertainment and enlightenment, things pleasant and things worth while to read, means for self-development of character and efficiency—these are the provisions which have made the Santa Fe Reading Rooms noteworthy. The company now appropriates some \$15,000 a year for maintaining the reading rooms, and the genius behind the chain of institutions is Superintendent S. E. Busser.

Take your map and note the stretch of country traversed by the rails of the Santa Fe system from Kansas, through Indian Territory, Oklahoma, Colorado, New Mexico and Arizona to California. Besides the (omnipresent) railroad branches of the Y. M. C. A. at Argentine and Topeka, Kansas; Cleburne and Temple, Texas; locate Emporia, Newton and Dodge City, Kansas; Purcell, Indian Territory; Woodward, Oklahoma; La Junta, Colorado; Raton, San Marcial and Albuquerque, New Mexico; Winslow and Seligman, Arizona Territory; Needles, Barstow and East Yards, California. At these fourteen places, some of them popularly dubbed as "jumping-off places" so far as civilized comforts go, one finds the company reading rooms, localizing a moral, social and intellectual movement in many respects unique in railroad management.

There are separate structures costing as much as \$8,000; in other cases extensions of company buildings have been utilized. Each reading room is in charge of a librarian, a salaried employee selected with an eye to his intellectual and personal qualities. The equipment begins with a reading room supplied with the periodicals and a circulating library of books; card rooms, billiard rooms, bath, toilet and

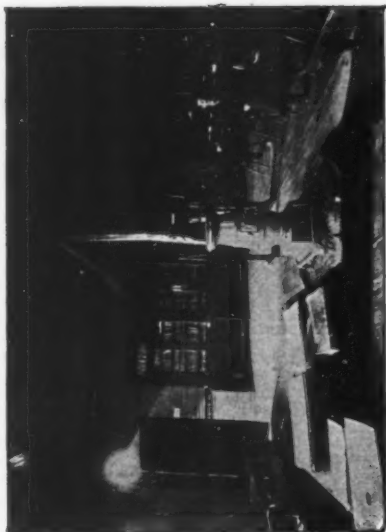
wash rooms, sleeping rooms and bowling alleys being included in complete structures. The privileges are free to all employees who are regularly on the company's pay roll. Only nominal charges are made for bath supplies furnished and use of billiard tables.

That these institutions are a part of a system does not mean that they are stereotyped in form or spirit. Fundamentally the idea has been to find out the human needs of the men under the conditions obtaining at any given point, and having found those needs plans have been adapted to them. In other words no taint of Pharisaical charity on the part of the company has marred the work, and the men have felt free to make known their special interests in the kinds of literature to be supplied, technical or otherwise, as well as in the character of instruction by lectures and the extent of social activities and home talent entertainments. The growth of coöperation between official and men in this way has been one of the most striking effects of the innovation.

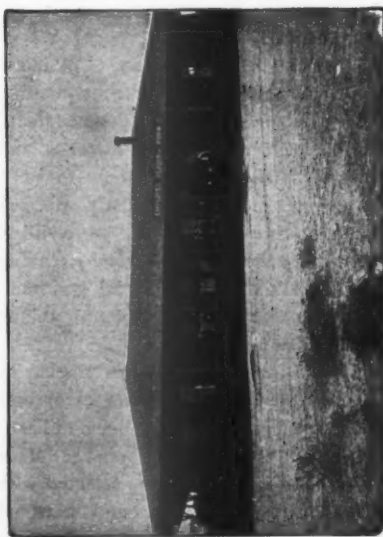
One cannot even briefly talk with Superintendent Busser without discovering a living embodiment of this spirit, and fortunately his enthusiasm is contagious. He will tell you that the success of the experiment should be credited to President E. P. Ripley's belief in more intelligence as a means of securing better service—the essence of the policy which has been inaugurated. And then he will tell you with equal delight how Santa Fe men, in audience assembled, have questioned some of the most expert authorities to a standstill on their own specialties when they least expected it. So it comes about that only first-class speakers and entertainers, eminent educators and specialists, interpretative readers and technical experts are taken over the line to appear before the men, and one sees a remarkable adaptation of the old lyceum or the newer extension lecture



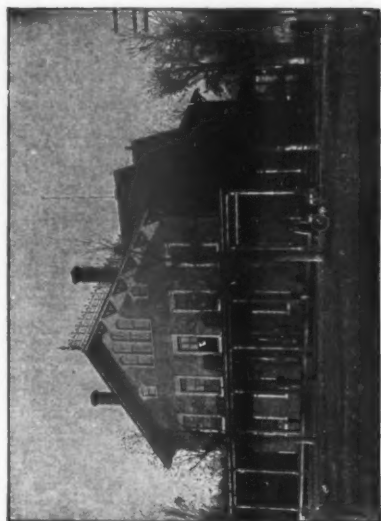
READING ROOM AT SELIGMAN, ARIZONA



READING ROOM AT RATON, NEW MEXICO



READING ROOM AT NEEDLES, CALIFORNIA



READING ROOM AT ALBUQUERQUE, NEW MEXICO

system to modern industrial conditions. Practical talks on such subjects as the care of the teeth, hygiene, memory training, etc., as well as scientific, historical, biographical and literary topics are given.

Wives and daughters have days of privilege at the reading rooms, and social clubs have been organized in connection with them.

To repeat, the theory underlying these establishments has been epitomized in the phrase, "give every man a chance." And the objects have been further summarized as follows:

"To aid the employees and their families in self-development.

"To surround them with influences by which their lives would be brighter and more hopeful.

"To give them an opportunity of making themselves worthy of promotion to higher spheres.

"To put a new value on a man's life, and emphasize brain and conscience power as a factor in railroad operation."

In regard to the reading matter selected and supplied, both instruction and entertainment are kept in mind. After a certain period magazines, weeklies and dailies are sent out from the reading rooms to the trackmen for their homes. It is stated that

of the books (the libraries are circulating under reasonable regulations) forty per cent are fiction, fifteen per cent historical and fifteen per cent biographical, ten per cent technical and ten per cent general literature, besides reference books. About fifteen per cent of the books are in use all the time. Furthermore the men buy books for their own homes; they send lists to the superintendent who delivers them free anywhere on the system, bills for purchase at trade discount being paid through the librarians.

The writer has interviewed a number of railroad officials who uniformly declare that the greatest need of the modern railroad is to discover men who are fit to assume higher posts in the service. To the credit of the Santa Fe reading rooms is to be placed the fact that special aptitudes have been discovered and developed through them which have led directly to promotions in the service. Again, it is plain to be seen that such a physical betterment of conditions, since railroading at best is hazardous and difficult, fosters better spirit and service among employees. And, wholly from the company's standpoint, the fact that constant enlargement of the work is being planned for, affords the best evidence that the investment is considered a good one.



Railroad Station Improvement

BY MRS. A. E. MCGREA

Landscape Architect.



LOOKING forward to a realization of high ideals in artistic development, it is with difficulty that one overcomes the feeling of discouragement at the slow progress along these lines. A glance backward, however, over the last twelve years, since I entered the field of landscape architecture, convinces me that wonderful strides have been made, and gives me faith in the future.

I have seen develop from tiny grass plats grudgingly permitted by a few railroads an almost universal system of parks surrounding the railroad stations throughout the country. True they vary in size and artistic effect, in proportion to the appreciation of the value of the work by the railroad managers, as results naturally depend upon the amount of money and skill expended. Not until recently have the services of experienced landscape architects been considered necessary, and many roads still permit their section men to have charge of the work. Comparisons may be odious, but they are nevertheless convincing. A glance at the results of the two methods clearly shows that utility and beauty, to be wisely combined, should be in the hands of persons trained to that special work.

Buildings can be planned artistically at very little more cost than the usual ugly station now seen. They can be grouped so that the station proper is the one building in evidence, the others being compactly clustered, in an inconspicuous position, quite hidden by a bank of shrubbery, which by judicious selection and arrangement, produces a succession of bloom, and ever-changing color, at the same time that it forms a background for the lawn, which should remain unbroken, except for a few shade trees, when space permits. The painting of the buildings is most important, and the selection of colors should be in the

hands of an expert, that harmony may result.

The Boston and Albany is a fair example of thoroughly artistic work, the Chicago and Northwestern and Michigan Central follow next. The Chicago, Milwaukee and Saint Paul has done more than any other system in the country in a given space of time, having parked and planted hardy shrubbery at over two hundred stations in two years. The Chicago, Rock Island and Pacific has built some handsome stations in the last few years, and it is the custom to place the grounds of new buildings in the hands of a competent person for arrangement, but no such general improvement work as undertaken by others mentioned has been done. The Chicago and Alton this spring began a thorough renovating of the entire system, having placed the paint selection, parking, and planting of fifty stations at once in the hands of a landscape architect.

A retrospective glance shows, first, the little oblong grass plat raised to a height of three feet, leveled and terraced with careful precision. This was for a time the station agent's pride; later a geranium or canna bed in the form of a crescent or star was added, the whole surrounded by a whitewashed fence, producing the deadliest kind of a graveyard scene. Next a greenhouse system was organized by some of the companies, and plants were propagated and distributed in quantities about the stations on their lines. That artistic arrangement and color harmony were not carried out will not appear strange when you consider that only common laborers were employed.

The advantages and economy of planting hardy trees, shrubs, and vines, which grow more beautiful which each succeeding year, and require no transplanting, are rapidly leading to the extermination of the monotonous, inartistic and expensive greenhouse planting.

Books for the Children

THE CHILDREN'S ROOM IN THE PUBLIC LIBRARY

BY MARY EMOGENE HAZELTINE

Librarian, James Prendergast Free Library, Jamestown, N. Y.



FROM earliest times two forces have been recognized as the basis of child-training, the home, which is practically a synonym for mother, and the school—the one to foster, guide, direct, to establish in ideals, morals, and right living, the other to give definite instruction in the learning of the ages and the affairs of life. There is need only to call to mind the training of the Spartan youth which the mother began, the solicitude with which Cornelia watched the development of her sons, and the testimony that as a boy in his father's house the child Jesus "grew and waxed strong in spirit, filled with wisdom," to give the historic setting of the home influence; and to mention the mother of the Wesleys, the patriotic inspiration of Abigail Adams and the noble motherhood of Mrs. Booth-Tucker to remember that it is still strong in the land. The authority of the schoolmaster cannot be overlooked when Roger Ascham, Dr. Arnold and Froebel bear the title, giving new interpretation and importance to the education of the young. The personal influence of parents and teachers and the knowledge gained from lessons and text-books have been the child's equipment for life and for his doing of the world's work.

But into this long established order a third element was introduced no longer than ten years ago—the children's room in the public library. Have you never visited a children's room? Then do so at your next opportunity, in the public library of your own city perhaps, or in Pittsburg, Buffalo, Brooklyn, Newark, Cleveland, Dayton, Milwaukee. Some of the most attractive of these rooms are connected with the social and college settlements, among which may be mentioned the East Side and University

Settlements, New York, and Alta House, Cleveland. The ideal room itself will delight you; sunny and cheerful, with low tables and chairs, and open bookcases lining the walls, with shelves low enough for the books to be easily reached. Appropriate pictures on the walls and interesting picture bulletins, illustrating topics of the day or suggesting by a series of pictures a special book that is well worth reading or a group of books that treat of a favorite subject, complete the appointments of the room, while happy faced, eager children are its adornment. The room is in charge of a children's librarian, trained for the work, and in closest sympathy with it. If the room is large and the children many, she has trained assistants to help. In the opening of such rooms the child has come into his own, where he can "tumble about" almost at will, according to Dr. Holmes's prescription.

This new educational force is already taking a ranking place with the older institutions, because it has been found to supplement their work. It must be borne in mind that the advantages of a cultured home are not for all children, that in many homes both parents are wage-earners, in others so burdened with care that the children receive scant attention, even granting that the parents have ability to give it. For such the children's room is a boon, providing the stories the mother is unable to tell, the answers to numberless questions that are riddles to her, the books she does not know that children crave or need.

It meets a need that the schools have never been able to supply, the opportunity, the place, the means, where education can be continued after school days are over. It must always be taken into consideration



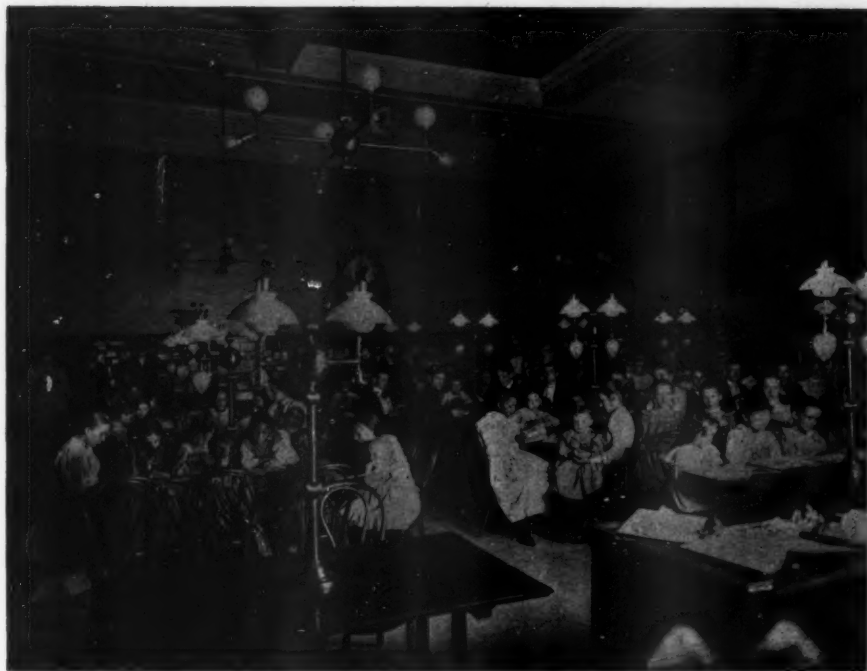
CHILDREN'S ROOM, HAZELWOOD BRANCH, CARNEGIE LIBRARY, PITTSBURG

that comparatively few children receive what is known as "a good common school education." President Thwing has said recently—"The course of a class from the day of its entering the public schools until the day of its graduation is a course like the march of an army in retreat—it is marked by what is lost. To think that three out of four of all the pupils who enter into the primary school have dropped out before the close of the last year of the grammar school, and to think that more than nine out of every ten pupils who enter the primary school do not survive until the close of the high school period, represents a tremendous fact for not only the American school, but also and more for the American home and American civilization."

The library does not arrogate to itself by any means the functions of either the home or the school, but it makes books possible for every child. It is the belief of librarians that the earlier the children find their way

into the realm of books the more incentive there is for good school work. Here they gain a knowledge of books as a whole, not the fragments that they find in text-books, and the true students among them are thoroughly roused and inspired to future study. The pupil who is indifferent and goes to school only under compulsion hoping to get out of it the easiest way, finds many a delightful companion and instructive friend in the books at the library. Best of all, those who must become wage-earners at no distant day have learned the way of self-instruction.

To select books that shall meet all these known quantities, and the constantly changing and unknown quantity, the growing child, whose fancy must be fed, whose desire for fun and craving for excitement satisfied, whose questions answered and interest held, is indeed a herculean task, and requires training and extensive reading. In these days of many books and skilful



CHILDREN'S ROOM, WYLIE AVENUE BRANCH, CARNEGIE LIBRARY, PITTSBURG

advertising it is not safe to select a book for a child other than by reading it, to discover that it be not of cheap quality and trivial interest, but rather, that it be sound and wholesome, with accurate statement if it be a book of information, and with charm and subtlety of style if it be a story, fairy tale or other work of the imagination.

Teachers are absorbed in their daily rounds and with the appraisal of the necessary text-books, and mothers, most of them, are too busy with their multitudinous duties to choose from the mass of juvenile literature what is best adapted for the growing child. It is no light task to keep abreast of the hundreds of books published for children, and to cast aside all that do not meet the standard. It surely cannot be done by the overcrowded teacher and the busy mother. Thus it came about most naturally that the librarian should undertake the work; and as it developed, and its possibilities were recognized, the children's own libra-

rian was found a necessity, one who should know both books and children.

It should be generally known that these librarians of children's departments are trained for their work as carefully as kindergartners and teachers. In fact there is a special training school for them in the Carnegie Library, Pittsburg. This professional education is built on the foundation of a high school and often of a college education. Literature, book-selection and the art of story-telling are required studies. Large opportunity is given for work with the children themselves, as it is believed that the only way to study children is by being with them—watching the appeal that different books make to them, hearing their opinion of the stories they read, suggesting books "to read" and "to read next," finding books that will give desired information, showing how to use the catalogue, seeing that hands are clean and books properly handled, keeping the youngest interested



STUDENT IN LIBRARY SCHOOL TELLING STORIES, CARNEGIE LIBRARY, PITTSBURG

with pictures, story-telling at an appointed hour, reading aloud at another, directing the boys' and girls' reading clubs; all this, besides required technical work, makes up the training and subsequently the daily task of those who work in the children's department. They know and understand children, and have a wide knowledge and appreciation of juvenile literature.

These librarians have found that several considerations should enter into the selection of books, especially their mechanical make-up, their literary value, and the moral effect on the child's character. The books must be printed on good paper in clear type and must be securely bound. Their illustrations must be the work of artists who do not overcrowd with details, who give good outlines, and who preserve the traditions of perspective, color values, form and proportion, else will the children gain false notions of things. The pictures of Cruikshank, Kate Greenaway, Palmer Cox, Howard Pyle and Calde-

cott, and the outline marginal drawings of Thompson-Seton are examples of those possessing the requisite artistic merit. While the question of the subject matter must be duly regarded, that the stories be wholesome, with *real* situations and *true* accounts, and that books of information be accurate, it must be as carefully considered whether they be presented in clear, vigorous English and in good literary form, and that their tone and import be neither mawkish nor sentimental but sincere and high.

A child readily understands and appreciates a book whose subject matter is adapted to his comprehension, even though it was avowedly written for adult minds and in the best literary style. A recent and forceful illustration of this is in the books of Mr. Thompson-Seton. Many of the familiar stories appearing in them were published first in the *Century* and *Scribner's* magazines, the recognized province of mature readers. But the children claim these books



CORNER OF CHILDREN'S ROOM, BUFFALO PUBLIC LIBRARY

as their own, and read them with avidity and delight. Indeed the borderland between juvenile and adult books is hard to define when the best literature is under discussion, for the children's classics, "Arabian Nights," "The Odyssey," "Robinson Crusoe," "Pilgrim's Progress," "Gulliver's Travels," Cooper's novels, "Ivanhoe," were not written for children at all, but have been adopted by them.

To choose wisely of the world's best literature in editions suited to children and to select most carefully from the mass of modern juvenile books is the librarian's greatest study and largest opportunity. But there is study also in the grading of the books, in order to give the child what is most likely to interest him at the right age. For the youngest there are picture books and the nursery jingles that fall pleasantly upon the ear before the mind takes much thought of what they mean, and for the expanding mind, fairy tales. Fairy tales, meaning by this carefully selected stories from mythol-

ogy and folk-lore, should be an intimate part of every child's life, for they are a very important factor in the right development of the imagination, while a knowledge of classic mythology and folk-lore is a necessary basis for the understanding of literary allusion throughout life. Also of enduring interest to children are stories of other children, of animals and birds. For the age when the child reads most, wholesome books must be at hand, Indian stories, stories of travel and adventure, of wars and heroes, and of outdoor life and school, with books of useful knowledge that answer the how, why and what of the inquiring child mind, and others that explain how all sorts of things can be made; while poetry, biography and history must not be overlooked. There is no side of the child's development neglected, for here are folk-lore and fable, nature stories, geography, history, fiction, poetry. And always in this department he has opportunity to search for himself until he finds the very books that meet his desires. This he

can be allowed to do safely because of the integrity of the collection.

The children's room in the public library should be regarded as a place first, for children, where they can go as freely and safely as to school, for their own delight, profit, culture and advancement; secondly, for mothers, as a center where they can ask advice about books for their children. No higher compliment can be paid the children's librarian than by seeking this advice, and she welcomes the coöperation of the home; thirdly, for teachers, as a haven for supplementary books, to help over many a difficult or uninteresting lesson.

But some mothers and teachers, unconsciously perhaps, deplore the influence of the library, feeling that it interferes with the school work, when in nine cases out of ten the child is finding in the library books the very things that make school and study worth while. Some mothers have the mistaken idea that fairy tales are unwholesome, ignoring the imagination that must be fed as well as the brain and brawn. Others think stories are harmful, and that the children are reading too much. There is no doubt that often individual children do read too much, but this is not the fault of the library, necessarily, for they would undoubtedly read from other sources if there were no library. The librarian and her assistant watch the children as far as possible, encouraging or restraining as the need may be, but the coöperation of the home is needed to assure the best use of the library. Whenever criticism exists it is safe to say that it is because the mother does not know the conditions and

ideals governing the children's department.

The children's room in the public library has a very positive place in the child's education, for it broadens the vision, awakens or fosters the imagination as the case may be and offers books that make for greater enjoyment in life, for wider culture, for fuller appreciation of education. It is the inspiration of childhood, providing wholesome and delightful reading amidst pleasant surroundings.

This new educational force has developed not only children's rooms, children's librarians, and an appraisal of children's books, but also has led to the publication of selected lists. These lists, though primarily designed for use in libraries, are admirable guides in the home, where it is so difficult to know what to choose for the child's own bookcase from the flood of books for the young folks. Among the best of these lists are:

Buffalo Public Library. Class-room libraries for public schools. Listed by grades. 31 cents.

Carnegie Library of Pittsburg. List of 1,053 children's books agreed upon by the Cleveland Public Library and the Carnegie Library of Pittsburg.

Carnegie Library of Pittsburg. Story-telling to children from Norse Mythology and the Nibelungenlied. 20 cents.

Iowa Library Commission, Des Moines, Iowa. List of books recommended for a children's library. 10 cents.

Wisconsin Library Commission. Madison, Wis. List of 493 children's books agreed upon by the Wisconsin, Iowa, and Minnesota Library Commissions.

HOME LIBRARIES FOR POOR CHILDREN

BY FRANCES JENKINS OLCOTT

Chief of Children's Department and Director of the Training School for Children's Librarians, Carnegie Library of Pittsburg.



A HOME library consists of a small, carefully selected collection of attractively bound and illustrated books in a neat bookcase. This library is sent into the home of some child who lives too far from the pub-

lic library to make use of the privileges it offers. A volunteer visitor, usually a young woman, presides over the library for an hour or so each week, and gathers about the bookcase ten or twelve of the neighborhood children, who form a reading circle. The



A PITTSBURG HOME LIBRARY GROUP

children take home the books and the visitor frequently lends cheaply framed pictures to hang on the walls of the homes. This "home library group," as it is called, meets weekly under the guidance of the same visitor. The idea originated with Mr. Charles Birtwell, secretary of the Boston Children's Aid Society, in this very natural way: "I had been connected with the Children's Aid Society but a short time," says Mr. Birtwell, "when many avenues of work opened up before me, and it was quite perplexing to see how to make my relations to the various children I became acquainted with real and vital. Among other things the children ought to have the benefit of good reading and become lovers of good books. . . . A little bookcase was designed. It was made of white wood, stained cherry, with a glass door and a Yale lock. It contained a shelf for fifteen books, and above that another for juvenile periodicals. The whole thing, carefully designed and neatly made, was simple and yet pleasing to the eye. I

asked my little friend Rosa at the North End, Barbara in South Boston, and Giovanni at the South End if they would like little libraries in their homes, of which they should be the librarians, and from which their playmates or workmates might draw books, the supply to be replenished from time to time. They welcomed the idea heartily, and with me set about choosing the boys and girls of their respective neighborhoods who were to form the library 'groups'."

It was in this way that home libraries were started, and since their establishment in Boston in 1887 they have spread throughout the country, being conducted by charity organizations, women's clubs and by a few public libraries. Under these different auspices home libraries have been established in Albany, Baltimore, Chicago, Philadelphia, New York, Providence, Cincinnati, Brooklyn, Pittsburg and many other cities.

In writing this article, I shall take it for granted that I am addressing, say, ten young

women who are about to organize a club to promote the spread of home libraries in a city of about ten thousand inhabitants where the usual problem arises of how to introduce the highest elements of civilization into lives



HOME LIBRARY GROUP IN OUR ALLEY, PITTSBURG

cramped and narrowed by care and ignorance. The hardest part of the problem, perhaps, is "Americanizing" that part of our foreign population whose filth and ignorance is our worst menace. The statistics of immigration are overwhelming; for instance, a certain well-known New England city has about 120,000 inhabitants, of these 80,000 are foreign born, or children of foreign born parents. There are 16,000 French Canadians, also large numbers of Swedes, Norwegians, Danes, Finns, Poles, Hebrews, Italians, Syrians and Armenians. Such a population will be found to a greater or less degree in every city.

Among foreigners work must be almost entirely with the children, as the parents rarely speak much English. Although this work is so greatly needed in the process of "Americanizing," still the needs of the ignorant though industrious American must not be forgotten. Many American parents among the poor are too busy earning bread

to care for their children, and the boys make a playground of the street corners and gutters, while the girls tend the babies and help with the housework. The older children are frequently taken from school as soon as they are capable of earning a few cents toward the family support, and put to work in factories and stores. The children of the tenements grow up deprived of their birthright of a natural development from babyhood through childhood into noble manhood and womanhood. The eager desire for knowledge which belongs to every normal child is deadened, and the quickening imagination stunted and depraved by the low talk of the streets and the blood and thunder of the "penny dreadfuls." As the boys and girls grow older, and mud-throwing, window-breaking and stealing apples from the corner store become too childish, the theaters and saloons open wide their doors to receive them.

What can the home library do to help these children? It can give them a friend in the visitor—a sympathetic, intelligent and cheerful friend, one who will take things as she finds them, and will not try to force reforms. Her sympathetic presence will draw out the mothers and children, her



AN ITALIAN LIBRARY GROUP, CHICAGO

tactful suggestions about home life and housekeeping will be followed, because she shows respect for the point of view of those she is trying to help and on whom she is not attempting to force her own manner of living and thinking. Through her the much longed-for books and pictures will find their way into the home. These will fill the children's heads with new ideas, beautiful thoughts and wholesome ambitions, to take the place of the ideals of life gathered from the perusal of such dime novels as "The Pirate Priest; or, The Gambler's Daughter," "The Fatal Kiss," "The Murdered Heiress," "A Crimson Crime," "The Cowboy Chief's Sure Shot," "Out with the Apache Kid," and "Solving the Madhouse Mystery."

The first steps in organizing home libraries are the selection of books and their preparation for use in the homes. Let us say that we have made a working center of the home of the president of our club of volunteer home library visitors. A committee may be appointed to procure books from the public library of the city. The club is indeed fortunate if the public library will undertake the selection and exchange of the books, for this will enable its members to throw their whole efforts into the actual work with the children and their families. But if the library rules interfere with the loan of books for such a purpose, the members of the club might pledge themselves to solicit contributions to the amount of twenty-five dollars each. Frequently libraries are given as memorials by parents who have lost children and who are glad to have the influence of good books go among the poor and needy; and sometimes the libraries are named for the children or for a child's favorite author. Twenty-five dollars purchases a neat bookcase and twenty volumes. In selecting the books it must be borne in mind that boys who have fed on the adventures of "Dashing Charlie, the Texan Whirlwind," "Gentleman Joe, the Gilt-edged Sport," "Dick Dead-eye," "Tracy the Outlaw," and "The James Brothers" cannot be interested at once in "Alice in Wonderland," "Tom

Brown's Schooldays," "Ivanhoe" and other children's classics. The transition from reading dime novels to actual enjoyment of good literature must be slow, and can be accomplished only through the infinite



BOSTON CHILDREN'S AID SOCIETY—A HOME LIBRARY GROUP

patience and perseverance of the visitor. An occasional boy will rise to the height of the "Oregon Trail" and "Ivanhoe," but on the whole the visitor must be satisfied if she raises the general standard of reading to Munroe, Henty and Otis. The same rule holds good in selecting books for girls.

Friends will offer worn-out books and pictures "good enough for those children," but if the attempt is made to do home library work with such material all hold on the children is soon lost, and very little is accomplished. The temptation in purchasing books for home libraries when one has limited funds is to buy cheap, unattractive school editions. This is a poor investment, for, in order to draw and hold children who are not accustomed to reading, a book should appeal to the imagination through



A HEBREW HOME LIBRARY GROUP, PITTSBURG

the eye. A book which through its binding, print and illustrations carries a message of beauty and refinement, will exert an influence for good over a child even though he does not read it through. For this reason it is better to purchase a few really attractive volumes than a large number cheaply printed and bound.

Some slight preparation of the books is necessary before sending them into the homes. All books should be marked or stamped with the name of the club or library to which they belong. A small blank book in which are written the authors and titles of the books makes a convenient "charging record." When a child "draws" a book for home use the little librarian should write the child's name and the date under the title of the book borrowed. When the book is returned the name should be crossed out. For the convenience of the visitor and the librarian the names and addresses of the children belonging to the

group should be enrolled in the back of the book. Of course where there are a large number of home libraries there must be a more complicated system of records.

The bookcase may be made of pine wood stained, and should have a substantial lock. The locks of all the bookcases should be alike, one key opening them all, otherwise many petty annoyances arise. The visitor should never leave the key in the home—she should always take it with her. Otherwise books disappear and the opening of the bookcase is no longer regarded as a peculiar privilege to be looked forward to from week to week. The usual method is to leave a case of books for about two months in a home, and then exchange it for another; in this way the home libraries may rotate from home to home.

The next step is to find the right home in which to place the libraries. This can often be done by conferring with the workers of charitable organizations, with parish visitors,



HOME LIBRARY GROUP OF COLORED CHILDREN, PITTSBURG

visiting nurses, pastors of colored and Italian missions. A good home once found where there is an intelligent mother, the visitor may do wonders for the neighborhood. One of the older children of the family in which the library is placed may be appointed librarian, a position of much honor. The librarian is the hostess at the weekly meetings of the group and gives out the books for home reading. The selection of other members of the group is a delicate task. One must remember that even in the slums there are distinct social classes and a strong feeling of caste. Inviting children "to join" who do not belong to the "set" or "gang" of the little librarian will often end in disrupting the group. It is far better to allow the mother to choose the children, the visitor stipulating that the children be about the same age, and, if she prefers, all boys or all girls. Mixed groups, unless the children are very young, are hard to manage if the visitor has not had much experi-

ence. A group should not number more than ten or twelve.

When the weekly hour of meeting is arranged to suit the mother's convenience, the visitor meets the children around the bookcase. The organization of the group and the method of spending the library hour will depend upon the sex and age of the children. Older boys like a brief business meeting conducted according to parliamentary rules. The less organization, however, and the more informal the meeting, the better. Occupations, such as sewing, basket-weaving, paper-folding and scrap-book making, teach the children to use their hands, and give them employment with which to fill their idle hours. The visitor may read aloud, tell stories or play games. The best plan is to have a regular program. Singing at the opening and closing of the hour is much enjoyed by the children. A story may be told or read aloud, the children given an occupation or a game, then the

books exchanged. Perhaps five-cent Perry pictures may be loaned to hang on the walls of the homes; these are thoroughly appreciated by the parents and the children. In beginning to work with the group, the visitor should choose very simple stories and games. She must educate the children



HOME LIBRARY BOOKCASE

to listen and to play. No visitor should attempt too many occupations, but should select one or two pleasant ones best suited to the tastes of her group and return to the same occupation week after week, otherwise she will not benefit the children. Anything hastily begun and dropped is extremely demoralizing. All games should be quiet ones in order not to disturb the older members of the family or the neighbors. If the meeting becomes a nuisance to the "grown-ups," the visitor will soon find her group without a home, and once having established a reputation for noise and disorder, it will be difficult to get another home in the neighborhood.

An occasional entertainment, such as speaking pieces, charades, a Christmas tree (the children making the gifts for the tree), an excursion into the fields and woods after wild flowers, and visits to the neighboring museums and art galleries, will keep up the children's interest and at the same time broaden their outlook on things in general. If possible the children should pay their own car fare. The inexperienced visitor should be very careful not to follow her natural inclination to give promiscuously of

clothing, candy and toys. This is a gentle warning. Do not give unless things are actually needed, and then give tactfully and sympathetically. It goes without saying that the influence of a successful visitor will be felt in the homes of all her children. An occasional visit to the homes and a mother's meeting will do much toward creating a friendly feeling.

Now a few words in conclusion on the preparation of the visitor for her work. Special preparation for this work is very simple, chiefly the reading of a few good books, which will put one into close touch with children and which will bring back the mischief, fun and frolic of one's own childhood. One should also read books dealing with the social conditions in American cities, not failing to remember, however, that conditions in one city differ from those in another, and that the same method of work does not apply everywhere. Home library work is full of discouragements for those who are looking for large returns. Only the visitor who has a firm belief that no good act or word falls on fallow soil without taking root and springing up to bear fruit which she herself may never see, can really succeed in this work. Hopefulness, persistency, and a strong sense of humor are requisite qualities; without the last virtue one is inclined to sentimentalize, or to be overcome by the outward sordidness of the lives in the crowded tenements.

Looked at selfishly, the home library work brings many returns. The affection of the children and the gratitude of the mothers are the least of these. It teaches one to discern and understand the deepest human charity—the charity of the poor for the poor. To share the last crust with one's next-door neighbor, to sit by the sick-bed of needy strangers, to be ready to help one another in emergencies, is the instinctive charity of the poor. This charity is the self-sacrifice of human beings whose sympathies are drawn to each other by mutual suffering. It is through this that we learn the true meaning of the "widow's mite."

GREAT LITERATURE AND LITTLE CHILDREN

BY MRS. H. L. ELMENDORF

President New York Library Association



IF one were to say, "Let fathers and mothers carefully choose pleasure books for their children and they need care little who chooses text-books," it might perhaps seem somewhat startling. Yet the statement is quite as true as the old saying, "If I may make the songs of a nation, I care not who makes its laws," and that we let pass without a thought. It is true to the same extent for the same reason; both versions are but different ways of saying that things which inspire to love and to pleasure are more powerful to form character than things which restrict or compel obedience.

It would be logical to take one step further, "If fathers and mothers will read to their children, at home, they may be comparatively serene as to who teaches them at school." If this step further seems a long step, let us take a shorter one. It is certainly true that parents who live with their children in this matter, have power to correct the inaccuracies and supplement the shortcomings of poor teachers, or have equal power to enrich the information and deepen the inspiration given by good teachers.

If fathers and mothers would take the trouble, and it a trouble which is its own reward, to really know the books which children may be helped to love, if parents would but open the doors of literature's "stately pleasure dome" and walk with their children in its glancing lights, they might be forever free from fear of godless schools or schools of narrow culture.

Many a mother who would be shocked by the bare statement of Rousseau's old doctrine that children should be wholly surrendered to the care of the community, not watched and ministered to in the family, does virtually surrender her own children to the care of the state in those things which are most vital to their real well-being. With care and toil and tret she feeds and clothes her children's bodies,

but is content to know little of school or teacher, either of day school or of Sunday-school, and is content to know still less of library or librarian. Yet these are the agencies that feed and clothe the mind and soul "that build for aye."

It is such "a sunny pleasure dome" too, "that dome in air," that one envies the fathers and mothers who play there with their children, and wonders how any are found who pretend to "the luxury of children," and yet surrender this delight to teachers or to librarians.

The gateway into literature is the printed page, but in the childhood of the race, to which teachers are fond of tracing back in studying how best to teach the children of to-day, it was not so. Literature then passed from lips to ears, and law and history, song and story, were always something "our fathers have told us."

Blind Homer and the chief singer of Israel and skalds and bards and minnesingers are all gone, tradition is almost a by-word, but mothers still live, and children need not wait until they have conquered the crabbed types before they begin to love literature.

A good many years ago, when the kindergarten was newly transplanted to this soil and its apostles were a flaming fire, a little mother went to hear a kindergartner lecture. The little mother's heart burned within her as she listened, and when the lecture was finished, she went forward and eagerly asked, "How soon may I begin to teach my little child?" The kindergartner gravely asked, "How old is your child?" and the little mother shyly replied, "My baby is only two months old." The kindergartner replied, in all seriousness, "You have, then, wasted the two most precious months of her life!"

The case is still more serious for the two months' old baby and literature, for the proper time to begin to teach a child to love literature is precisely that prescribed by Dr.

Holmes at the time to call the doctor for the cure of some diseases, you should begin with the grandmother. It is not "the two most precious months," but the two most precious generations that are wasted if the grandmother was not taken in time.

It is a defrauded baby who was not crooned over in her grandmother's arms with

"When shepherds watched their flocks
by night,"

and

"Hush, my dear, lie still and slumber,"

and

"There is a green hill far away."

The small girl has missed part of her birthright who did not sit on her father's knee and listen, wide eyed,

"To hear how the water

Comes down at Lodore

With its rush and its roar,"

or to whom in after years a little, old, ragged blue-and-gold Scott is not dear because the sight of it brings back her mother's voice saying,

"The stag at eve had drunk his fill,"

and all the long, lovely story.

"But the child does not understand it all!"

To be sure she does not, but she listens, she remembers, "she keeps all these things in her heart," and one day she will understand.

A good many years ago in those dark ages when the ideal of most public libraries was that they were places to gather and *preserve* books—what their ideal is now is another story, but it is not that—in a certain library in a certain city a legend, writ large, ran thus: "Children and dogs not allowed." The notice meant that this library had, what most libraries had in those days, though perhaps few of them expressed it quite so brusquely, what is technically known as "an age limit," which means that it excluded the children. Literature has no "age limit;" the littlest children, especially "children accompanied by parents or guardians," may come and find welcome.

Much might be said about the advantages of introducing children to great literature

while they must be read to. In the first place, there is the gain in time. Children are made free of "the rich deposit of centuries" years before they could read for themselves. In the second place, the story-hour affords a charming meeting place for parents and children and adds much to mutual understanding and sympathy. In the third place, children gain an understanding of certain forms of literature from the cadences of the voice that the printed page alone never gives. A deaf Beethoven could *hear* with his eyes on the written musical notes. Only a poet really knows poetry from the printed page alone.

But the better understanding is not confined to poetry for matter, nor to the littlest children for auditors. A young girl of no very bookish type once visited in the home of an uncle who loved his wife's reading of the inimitable fun of the "Uncle Remus" tales. The young girl "didn't care for Uncle Remus," but she listened, and by and by all alone, in her quiet hour, she was heard reading the same passages aloud, catching the very lilt of her aunt's voice as the story told how "Brer Rabbit come pacin' down de road—lippity-clippity, clippity-lippity—dez ez sassy ez a jay bird."

It is not for nothing that we feel a sense of disappointment in reading those speeches of great orators, by which they swayed multitudes. We have the words the man spoke, but the man behind the speech, the compelling cadences of his voice, the emphasis of face and gesture are all lost.

Many a child is shut out forever from the love of poetry because when he is young and lisps in numbers with the greatest ease, no one opens the gates of real poetry to him by reading to him, and so showing him by spoken words the music and flow of the measured, melodious lines.

Children can be helped to lay up untold treasures for themselves in those young days when memory's mirror is bright, by being taught to learn poetry—but "that is another story" which must not invade this one.

All along, literature has been compared to Southey's "stately pleasure dome," but

the book world today is more like that mountain forest which we New Yorkers call the North Woods. Giant trees are the glory of it, but between and around them is a mass of underbrush, much of it beautiful too in its own way, which yet makes a journey through the forest difficult and slow. The wise man nowadays who would fain attract those who need health and strength and refreshment into the beautiful forest, cuts trails through the trees, past the big tree, by the mountain brook, with now and then a far-reaching vista through toward great mountain peaks. He sacrifices some things in making the trail, but he prepares a way by which folk whose life-work falls on a different road, may gain some notion of the chief delights of the forest.

Perhaps the most helpful thing that the librarian, whose daily life is in the forest of the books of the day, can do is now and then to make a list of books that shall serve, in some sort, as a trail through his forest. Those who delight to thread the forest unaided need not touch such lists. Those who would like to start contentedly on a smaller journey may find some use in them. So a committee of the New York Library Association has thought it might help busy mothers somewhat with the suggestion of about a dozen books that they would like to read to the little folks.

What is read to a child, what a child reads, is not valuable chiefly for the facts thereby taught, but rather for the pleasure that it gives now, and still more for the pleasure it prepares for in after life. Literature has a great mine, that "rich deposit of centuries" spoken of before, and from it all our best authors continually draw, for the enrichment and ornament of their work, in allusions to the great, old-world tales. The New York State list has been made up almost wholly of collections of these great old stories and rhymes.

Where should we begin but with "Mother Goose" herself? Mothers will like an edition arranged by Charles Welsh called "A Book of Nursery Rhymes."

Some of the coarsest rhymes are omitted, and the whole has a good introduction and a pleasing arrangement. The child loves the witty nonsense and the rhymes linger in his memory to point many a moral and adorn many a tale. For example; how easily the child catches the idea of an easy, pleasant greeting of the passing stranger from

"One misty moisty morning,
When cloudy was the weather,
I chanced to meet an old man
Clothed all in leather.
He began to compliment
I began to grin."

Next is the little old favorite "Verse and Prose for Beginners in Reading." This also contains many nursery rhymes, but much beside, and is so inexpensive and so good that it is quite worth while. The publishers might make us an edition in holiday dress, to their own advantage and to our pleasure.

Next is "Baby's Own Aesop," with morals pictorially pointed in a series of delightful pictures by Walter Crane.

Next might come Kate Douglas Wiggin's "The Posy Ring," the most charming collection of verses for children that heart could desire, though a close second to it is called "The Land of Song" and is made up by Katharine Shute in three pretty volumes, graded for children from the littlest up.

Then there is the ever-welcome Grimm's "Fairy Tales," and, as the mother is to read them aloud and let the children look at the pictures, there is no version that equals Lucy Crane's translation with pictures by Walter Crane.

Perhaps even before Grimm might come the children's own "Hans Christian Andersen," whom no translation has been able to spoil, but who is most truly rendered in the edition by Mrs. E. Lucas, illustrated by the Robinsons.

The famous old French fairy tales of Charles Perrault, which include "Cinderella," "Little Thumb," "The Sleeping Beauty" and others, are well told in an edition translated by Charles Welsh, called "Tales of Mother Goose."

From fairy tales to the old classic myth, is but a step, and such a pleasant step, in Hawthorne's "Tanglewood Tales" and "Wonder Book," and the edition of the first with pictures by George Wharton Edwards, and of the second by Walter Crane, give much pleasure, though they are expensive.

The Jungle Book by Kipling can be read to children much earlier than most people think, and dear old "Uncle Remus, His Songs and His Sayings" will be almost a sealed book to children because of the difficult look of the dialect, unless it is read aloud. "The Book of Nature Myths," by Florence Holbrook, and "Collection of

Wigwam Stories," by M. C. Judd, and "Fifty Famous Stories Retold," by James Baldwin, round out a short series that the youngsters will enjoy, and the mothers too.

Let us not forget to add mention, though they are not on the published list, of two little volumes of "Old and New Testament Stories," in the "Modern Reader's Bible" set, which are in the real words of the Bible, but so arranged as to tell the stories, and nothing but the stories.

Of all the great books of the world, the Bible furnishes more allusions many times over in literature than any other, and no one can read the great poets or essayists understandingly without knowledge of its riches.

N a t u r e S t u d y

THE CLOVERS—THE BUMBLEBEE

BY ANNA BOTSFORD COMSTOCK

The pedigree of honey does not concern
the bee,

A clover any time to him is aristocracy.

—Emily Dickinson.



HERE is a deep-seated prejudice in the human mind that usefulness and beauty do not belong together—a prejudice based obviously on human selfishness, for if a thing is useful to us we emphasize that quality so much that we forget to look for its beauty. Thus it is that the clover suffers great injustice; it has for centuries been our most valuable forage crop, and, therefore, we forget to note its beauty, or to regard it as an object worthy of esthetic attention. This is a pitiful fact; but it cheats us more than it does the clover, for

the clover blossoms not for us, but for the bees and butterflies. As I remember the scenes which have impressed me most, I find among them three in which clover was the special attraction: One was a well-cultivated, thrifty orchard carpeted with the brilliant red of the crimson clover in bloom. One was a great field of alfalfa spread near the shore of the Great Salt Lake, which met our eyes as we came through the pass in the Wasatch Mountains after days of travel in dust-colored lands; the brilliant green of that alfalfa field in the afternoon sunlight refreshed our eyes as does the draught of cold water refresh the parched throat of the traveler in a desert. And one was a gently undulating field in New York stretching away like

This is the ninth of the Home Nature Study Lessons for Parents and Teachers prepared by the Cornell University Bureau of Nature Study, reproduced by permission each month in The Chautauquan. The following topics have been discussed: "The Ripened Corn—The Ways of the Ant," "The Sugar Maple—The Red Squirrel," "The Chickadee—The Snow Storm," "The Nuthatch—Our Use of Food Stored in Seeds," "The Maple in February—The Brown Creeper," "The Skunk Cabbage—The Mourning Cloak," "The Trilliums—The Chipping Sparrow," "Ants, and Their Herds—The Onion."



Hush, ah hush, the scythes are saying, Hush, and heed not, and fall asleep;
Hush, they say to the grasses swaying, Hush, they sing to the clover deep!

—Andrew Lang.

a sea to the west, covered with the purple foam of the red clover in blossom; and the fragrance of that field settled like a benediction over the acres that margined it. But we do not need landscapes to teach us the beauty of clover. Just one clover blossom studied carefully, and looked at with clear-seeing eyes reveals each floweret beautiful in color, interesting in form, and perfect in its mechanism for securing cross pollination.

The clover is especially renowned for its partnerships with members of the animal kingdom. It readily forms a partnership with man, gladly growing in his pastures and meadows, while he distributes its seed. For ages past it has been a special partner of the bees, giving them honey for carrying its pollen. And below the ground it has formed a mysterious partnership with microbes, and unlike man in his relations to these small beings, the clover seems to be getting the best of the bargain.

For many years clover was regarded as a crop helpful to the soil, and the reason given was the great length of the roots. Thus the roots of red clover often reach the depth of several feet, even in heavy

soil which they thus aerate and drain. But this is only half the story; for a long time people had noted that on clover roots were little swollen places or nodules, which were supposed to have come from some disease or insect injury. The scientists became interested in the supposed disease, and they finally ascertained that these nodules are filled with bacteria, which are the underground partners of the clovers and other legumes. These bacteria are able to fix the free nitrogen of the air, and make it available for plant food. As nitrogen is the most expensive of the fertilizers, any agency which can extract it from the free air for the use of plants is indeed a valuable aid to the farmer. Thus it is that in the modern agriculture clover is put on the land once in three or four years in the regular rotation of crops, and brings back to the soil the nitrogen which other crops have exhausted. An interesting fact about the partnership between the root-bacteria and the clovers, is that the clovers do not flourish without it, and the scientists have devised a method by which these bacteria may be scattered in the soil on

which the clover is to be planted, and thus aid in growing a crop. This method is today being generally used for the introduction of alfalfa in New York state. But the use of clover as a fertilizer is not limited to its root factory for capturing nitrogen; its leaves break down quickly and readily yield the rich food material of which they are composed, so that the farmer who plows under his second-growth clover instead of harvesting it, adds greatly to the fertility of his farm.

The members of three distinct genera are called clovers: The true clovers (*trifolium*) of which seven species are commonly found in New York state, and more than sixty species found in the United States. The Medics (*medicago*) of which four species are found here. The Melilots (*melilotus*) or sweet clovers of which we have two species.

THE TRUE CLOVERS (*Trifolium*)

The Red Clover (*T. pratense*).—This beautiful dweller in our fields came to us from Europe, and is also a native of Asia. It is the clover most widely cultivated in New York state for fodder, and is one of our most important crops, clover hay being the standard of excellence by which other hay is measured. The export of clover seed from the United States has sometimes reached the worth of five million dollars per year, and this great industry is carried on with the aid of that other partner of the red clover, the bumblebee. This great bee alone has a tongue long enough to reach the bottom of the tubular flowers of the red clover, extract the nectar and do the work of pollination. Bumblebees had to be imported into Australia before clover seed could be produced there, and in this country the places where the ignorant have waged wicked and destructive war upon the bumblebees produce no seed. There are sections of New York state where the growing of clover seed was once a most profitable business, which now produce no clover seed whatever owing to the dearth of bumblebees. But all farmers

have not been so ignorant, and we know there are places in our country where the mammoth red clover is grown for seed, and it is pastured or clipped early in the season so that its flowers will not appear until the bumblebees are sufficiently numerous to pollenate them.

Zigzag Clover or Marl Grass (*T. medium*).—This is another species of red clover, very much resembling the one just discussed, except that its flower head rises on a little stalk above the upper leaves, while the red clover has the flower head set close to these leaves. The stems of the zigzag clover are likely to be bent at angles, and thus it gets its name.

Buffalo Clover (*T. reflexum*).—This is sometimes taken for a variety of the red clover, but only a glance is needed to separate it. While the head is perhaps an



BUFFALO CLOVER

inch in diameter, the flowerets are not directed upward and set close as in the red clover, but each floweret is on a little stalk, and is bent abruptly backward. The flowers are not pink. The standard is red, while the wings and keel are nearly white; the leaves are blunt at the tip. It grows in meadows in Western New York and westward.

Crimson Clover (*T. incarnatum*).—While this beautiful clover grows as a weed in southern New York State, it has only recently began to play an important part in our horticulture. It is an annual, and its home is the Mediterranean region of Europe. It thrives best in loose,

sandy soils, and is principally used as a cover crop for orchards, and to plow under as fertilizer. It has bright, crimson flowers, arranged in a long, pointed



CRIMSON CLOVER

head, and its brilliant green, fan-shaped leaves make it the most artistically decorative of all the clovers.

Alsike (*T. hybridum*).—This is a perennial and grows in low meadows and waste places from Nova Scotia to Idaho. It is especially valuable in wet meadows where the red clover would be drowned. The cattle do not relish it as they do the red and white clovers, but it is, for all that, much used for fodder. The blossoms of the alsike look like those of the white clover except that they are a little larger and are pink; but the long branching stems are very different in habit from the stems of the white clover; the blossoms are very fragrant.

The White Clover (*T. repens*).—This beautiful little clover whose leaves make a rug for our feet in every possible place is well known to us all. It is the clover best beloved by honey-bees; and the person who does not know the distinct flavor of white clover honey has lost something out of life. While in hard soil the white clover lasts only two or three years, on rich, moist hands it is a perennial. Its leaves contain a large per cent of protein

or muscle-making food, and it is, therefore, a most valuable clover for pastures. While it was probably a native in the northern part of America, yet it is truly cosmopolitan and may be found in almost all regions of the temperate zones. It even cheers Siberia with its presence.

The Yellow, or Hop-Clover (*T. agrarium*).—This friendly little plant filling waste places with brilliant green leaves, dotted with small yellow flower heads is not considered a clover by those who are not observant. But if the flowerets in the small, dense heads be examined, they will be seen to resemble very closely those of the other clovers. The stems are many branched and often grow a foot or more in height. The flowers borne on the tip of the stem are numerous, and on fading turn brown, and resemble the fruit of a pigmy hop vine, and therefore the name. Its leaves are much more pointed



YELLOW CLOVER

than those of the Medics, with which it might be confused because of its yellow flowers.

Low Hop-Clover, or Hop-trefoil (*T. procumbens*).—This resembles the species above mentioned except that it is smaller and also more spreading, and the stems and leaves are more downy.

The Least Hop-Clover (*T. dubium*).—This may be readily distinguished from the above species by the fact that its yellow flowerets occur from three to ten in a head. This is said to be the true sham-

rock, although the white clover is sometimes called the shamrock.

The Rabbit-Foot, or Stone Clover (T. arvense).—This is another clover not easily recognized as such. It grows a foot or more in height and has erect branches. The leaflets are narrow and all



RABBIT-FOOT OR PUSSY CLOVER

arise from the same point. The flowerets occur in long, dense heads. The calyx is very silky, and the lobes are longer than the white corollas, thus giving the flower head a soft, hairy look, something like the early stages of the blossom of the pussy willow. Because of its appearance it is often called "pussy clover."

THE MEDICS (*Medicago*)

Alfalfa (M. sativa).—This is the veteran of all the clovers, for it has been under cultivation for twenty centuries. It is a native of the valleys of Western Asia. In America it was first introduced into Mexico by the Spaniards with the Spanish invasion. It was brought from Chile to California in 1854, where it has been since that time the most important hay crop. In fact, there is no better hay than that made from alfalfa. It was probably introduced into the Atlantic States from Southern Europe, and has grown as a weed for many years in certain localities in New England and the Middle States; only recently has it been considered a practicable crop for this climate. Its special value is that it is a perennial, and may be cut three times at least during a season. The flower is blue or violet,

and grows in a loose raceme; alfalfa grows tall and its stems are many branched.

Black or Hop Medic (M. lupulina).—This would hardly be called a clover by the novice. The long stems lie along the ground, and the tiny, yellow flower heads do not much resemble the clover blossom. It is a common weed in waste places in New York State.



ALFALFA

The Toothed Medic (M. denticulata).—Instead of having the yellow flowerets in a head this species has them in pairs or perhaps fours, or sometimes more, but never in a dense head. It is widely distributed as a weed, and is also extensively introduced as a pasture plant for early grazing. It is of little value as hay.

The Spotted Medic (M. Arabica).—This very much resembles the preceding species except that the leaves are likely to have



SPOTTED MEDIC

on them conspicuous dark spots near the center. Like the preceding species it is an annual and a weed, and has also been introduced as a plant for early grazing.

This and the toothed medic are known to farmers under the name of bur-clover. The reason for this name is found in the seed pod which is twisted in a spiral, and has an outer margin of curved prickles.

THE MELILOTS, OR SWEET CLOVERS (*Melilotus*)

The Sweet Clover.—In driving or walking along the country roads we find ourselves suddenly immersed in a wave of delightful fragrance, and if we look for the source we may find there in the most forbidding and hardest soils of the roadside,



YELLOW SWEET CLOVER

this friendly plant, that, growing as a weed, brings sweet perfume to us, and at the same time nitrogen, aeration and drainage to the hopeless soil, making rich those places where other weeds have not the temerity to attempt to grow. When the soil is generous the sweet clover often grows very tall, sometimes as high as ten feet. It is a cheerful, adaptable and beneficial plant, and I never see it without giving it a welcome, which, I am sorry to say, I cannot always grant to other road-

side wayfarers, which have come to us from Europe.

The White Sweet Clover (*M. alba*) is sometimes called Bokhara clover and has white flowers.

The Yellow Sweet Clover (*M. officinalis*) has yellow blossoms. It has interesting old English names, such as, Balsam-flower, King's Clover and Heartwort.

QUESTIONS ON THE CLOVERS

1. How many of the true clovers, the medics, and the sweet clovers do you know?
2. Make a collection of labeled pressed specimens of the leaves and blossoms of the clovers which you have been able to find.
3. Dig up a root of red clover and find the nodules on it? Describe them.
4. What methods does the United States Department of Agriculture employ to inoculate the soil with bacteria so that alfalfa hay may grow? (Send for Bulletin).
5. How do clover roots protect the land from the effects of heavy rains?
6. How do the clover plants conserve the moisture in the soil?
7. How does this conservation of moisture aid the farmer and orchardist?
8. What is a clover crop and what are its uses?
9. Why do farmers sow red clover with grass seed?
10. How do the habits of the stems of white clover differ from those of other clovers?
11. Why is white clover so desirable for lawns?
12. Compare the floweret of the red clover with the sweet pea blossom, and describe the resemblance.
13. Study a head of white clover from the time it opens until it is brown and tell what changes take place in it day by day.
14. What has happened to the flowerets which are bent downward around the stalk?
15. Watch one of these flowerets deflect and describe the process.
16. How many flowerets do you find in a head of red clover? Of white clover? Of alsike?
17. Which flowerets open first in a head of red clover?
18. Describe a clover seed. Describe a seed of alfalfa.
19. What insects do you find visiting the red clover blossoms? The white clover blossoms?

THE BUMBLEBEE

There seems to have been an hereditary war between the farmer boy and the bumblebee, and hostilities are usually begun

intentionally or otherwise by the boy. Like many other wars this one is foolish and wicked, and has resulted in great harm to both parties. Luckily the boys of today are more enlightened, and it is to be hoped they will learn to endure a bee sting or two for the sake of protecting



THE BUMBLEBEE AT WORK

these diminishing hosts which carry pollen for so many flowers.

The bumblebee is not so thrifty and forehanded as is the honey-bee, and does not provide enough honey to keep the whole colony alive during the winter. Only the mother bees, or queens as they are called, survive the cold season. In early May one of the pleasant sights is this great buzzing queen flying low over the fresh, green meadows, trying to find a suitable place for her nest; and the farmer or orchardist who knows his business looks with pleasure on this busy rover, knowing well that she and her children will render him most efficient aid in growing his fruit and seed.

The queen bumblebee selects some cozy place, very likely a deserted mouse's nest, and there begins to build her home. She works hard on the orchard blossoms and other flowers, gathering pollen which she makes into a solid piece of bee bread, and on it lays a few eggs. The little bee grub

when it hatches burrows into the bee bread, making a little cave for itself while satisfying its appetite; after it is fully grown it spins about itself a cocoon and changes to a pupa, and after a time emerges a full-fledged worker bee. The worker bee is smaller than the queen, and all which hatch from these first eggs are workers—daughters who are content to stay at home and attend to the wants of the growing family. As soon as the first brood takes up the work of the nest, the queen bumblebee remains at home and lays eggs for the enlargement of the colony. The workers not only take care of the young and rear them, but later strengthen the silken pupa cocoons with wax, and make them into cells for storing honey. Thus it is that the cells in the bumblebee comb are so disorderly, extending in every direction where the young bees have chanced to burrow. Perhaps the boy on the farm would care less for the rank bumblebee honey, did he know that it is stored in the cast-off garments of the bee grubs.

All of the eggs in the bumblebee nest during the spring and early summer develop into workers, which do the difficult labor of carrying pollen for a vast number of flowers; and to these is granted the privilege of carrying pollen for the red clover. Later in the season the queen and drones are developed in the nest, and of these only the queens survive to carry on the work of the species.

QUESTIONS ON THE BUMBLEBEE

1. How is a bumblebee fitted to carry pollen for the flowers?
2. Where does she carry the pollen which she uses for food for the young bees?
3. Have you seen a queen bumblebee this year? If so describe her and her actions.
4. How many kinds of flowers have you observed the bumblebee visiting this season?
5. Is the bumblebee more of a benefit to the orchardist or the farmer?

Civic Chronicle for 1903 and 1904

BY CHARLES ZUEBLIN

University of Chicago; Past President American League for Civic Improvement.



URING the past year such spectacular improvements as those of Washington and Harrisburg which were recorded the year before have deserved added attention because of the steps taken in their realization. The action of congress in establishing a definite width of the Mall stopped the threatened encroachment of the Agricultural Department and promises to realize the magnificent plans of the commission. The work in Harrisburg is in process as was described in the March CHAUTAUQUAN. Of minor improvements the number is legion, and can be best appreciated perhaps by grouping some of them under the heads of the section councils of the American League for Civic Improvement.

I. ARTS AND CRAFTS

Exhibitions of craftsmanship are held in various cities of the country in increasing number, this last year being no exception, and being signalized by an unusual exhibition at Syracuse, under the expert guidance of Mr. Gustav Stickley, which was subsequently carried to Rochester. This has suggested the desirability of some organization lending assistance to minor places in the promotion of Arts and Crafts exhibits, a movement spontaneously emanating from some public libraries and the Federation of Women's Clubs. The various craftsmen and societies of Chicago have united in an exhibition of great importance at the Art Institute, thus checking the dangerous tendency to diffusion and individualism in this movement. The Arts and Crafts Society of Dayton, Ohio, held frequent exhibits of individual crafts throughout the year. The Minneapolis public schools provided an Arts and Crafts exhibit which has been sent abroad and shown in London and other European cities. The Richmond Art Association, which holds an annual exhibition of paintings and handicraft, secured an unusually representative collection of canvases from the best American artists last June, and in addition had as usual a comprehensive Arts and Crafts exhibition, together with an exhibit of the work of the city schools. The attendance increased even over the phenomenal numbers of last year, more than half of the entire population visiting the exhibit held in one of the chief public school buildings. Public sanction was given to the work of the association for the second time, by the appropriation of one hundred dollars by the city council, a valuable precedent for other communities. The Arts and Crafts Village has so flourished at Chautauqua that a very extended scheme is included in the plan for the

reconstruction of this most popular of educational resorts. THE CHAUTAUQUAN Magazine inaugurated an Arts and Crafts Department, which has met with such response that it was continued for a second year.

II. MUNICIPAL ART

The record of the year in the progress of municipal art includes events both small and great. The annual high school debate in Buffalo gave evidence of the advance of public sentiment, by the selection of the subject "Would the Society for Beautifying Buffalo serve the public interest better by improving the natural features of the city, or encouraging the work of man?" The St. Louis Art League, following the successful example of Boston, instituted a competition among the public school children in the form of an examination designed to test their appreciation of the elements of beauty in a city.

The Municipal Art Leagues of the various cities have maintained their usual activity. In New York the annual exhibit was held at the National Arts Club, with the customary success. In the extension of membership and in increasing influence in municipal affairs, this New York organization has enjoyed a rarely successful year. Four dinners were held last winter at which various phases of municipal art were discussed. The mural decorations in the Baltimore court house, happily not destroyed in the recent fire, marked the close of a year of triumph for the Municipal Art League, which, by subscribing \$5,000, had persuaded the city authorities to subscribe \$10,000 more for mural paintings in the beautiful new court house. These decorations of Blashfield and Turner proved to be so successful that the city authorities this last year appropriated another sum of \$10,000. The Municipal Art League has also erected a statue in one of Baltimore's parkways. The Municipal Art League of Chicago has devoted its energies to agitating for the suppression of the smoke and bill-board nuisances. It has been a year of exceptional activity, marked by modest advances, due to the apathy of public officials and the vigor of the offenders; but the organization is undaunted, and a new smoke department and better bill-board legislation furnish the machinery for progressive effort. Detroit has recently joined the cities opposing the encroachment of the bill-board.

This has been a significant year in the advance of mural decorations in America. In addition to the achievement in Baltimore, the Boston public library has been enriched by another piece of Sargent's work; the beautiful new capitol at St.

Paul is to receive decorations by LaFarge; the miserable capitol building at Harrisburg is to be transformed by superior architectural work without and the color scheme of the interior is entrusted to Edwin A. Abbey. Minor mural decorations of significant beauty are those in the Hull-House theater, and the Englewood and McKinley high schools, Chicago.

Several advances have been made in the promotion of civic centers. The Cleveland group plan on Lake Erie is progressing. Chicago has finally secured the Lake Front Park appropriation, sanctioned by popular vote, April 6, 1904, to be adorned by the Field Columbian Museum and the Crerar Library. Syracuse is following up the completion of its Carnegie Library by the erection of a court house vis-a-vis, in the hope that subsequently each corner of the converging streets will be adorned by public buildings. New York City, in which a civic center has long been contemplated by progressive citizens, is not likely to adopt Mayor Low's suggestion that the transportation facilities of the Brooklyn bridge and the office necessities of the city require coöperation in the securing of a great terminal station and municipal building, which shall dominate even the surrounding skyscrapers, but a dominating building is in prospect. The approaches to the Brooklyn borough building are also to be made adequate.

While nothing comparable to the Washington improvements has taken place, mention must be made of the admirable plans of the Chautauqua Institution for the rebuilding of their beautiful site on the lake, under the direction of Mr. Albert Kelsey, civic architect, Mr. Warren H. Manning, landscape architect, and Mr. J. Massey Rhind, sculptor. The St. Louis model city has finally received the sanction of the World's Fair authorities in the reduced form of a model street, and under the direction of Mr. Kelsey it promises to enlighten the country as to the possibilities of rebuilding our cities. The construction of the new capitol at St. Paul has suggested the necessity of reorganizing the approaches so that not only adjoining streets but perhaps a new thoroughfare, which will give a vista to the river, may be effected by the plans. Boston has contributed to the general welfare as well as secured a local triumph in winning the fight for the protection of the sky-line on Copley Square. Henceforth the eye enjoys a place with the other organs in the estimation of the common law.

To crown the civic year, Mr. Charles Mulford Robinson issued his second volume through the press of Putnam's, an admirable treatment of the theme "Modern Civic Art."

III. MUNICIPAL REFORM

The complete statement made annually by Clinton Rogers Woodruff makes unnecessary a full

account of progress in municipal reform. Worthy of special mention, however, are the successful renewal of the fight in Harrisburg for the execution of what is so widely known as the "Harrisburg Plan" for the comprehensive improvement of the city; the struggle in Chicago due to the expiration of its chief street railway franchises, giving it the best opportunity in the country for requiring public services, by the granting of extensions or municipal ownership, the last demanded by referendum vote; the repeated successes of Dr. Ohage in St. Paul, in his fight against commercialism, in which he has finally triumphed by appealing to the court to protect city property from the encroachment of industries; and the public ownership conference held at the Reform Club in New York, in the spring of last year, bringing together representatives of all phases of the question for the most complete discussion which has yet been held.

IV. PARKS

St. Paul has during the year condemned five or six miles of its river front for the purpose of a boulevard, which shall ultimately both encircle and bisect the city. In Philadelphia there has finally been taken a decisive step to secure a parkway from the city hall to Fairmount Park, that greatest of the early American city parks being still without any adequate approach. This scheme, for which funds are now provided, is ambitious enough to necessitate the blazing of a way through buildings, in order to make an adequate connection between the heart of the business district and the southern end of the park. New York City has followed the example of Boston and other Massachusetts cities in beginning the reservation of its seashore, which will doubtless lead to such an improvement in resorts like Coney Island as were witnessed when New York state took over the administration of Niagara Falls. Springfield, Massachusetts, is to the fore again with a plan for the resumption of its river front. Salt Lake City, which has the almost unique distinction of being blessed by running water through its chief streets, has begun the beautification of those streets by providing for street lawns in the middle of Bingham avenue.

In the extension of parks this year, Chicago is in the lead. Beginnings have already been made in the establishment of small parks and playgrounds on the three sides of the city, by the utilization of the \$2,500,000 authorized by legislature. In addition to this the South Park system has received a notable addition in McKinley Park, where, among many forms of recreation furnished the people, is to be found perhaps the finest open-air bathing provision in any inland city. The South Park system is to be further enriched by the completion of the Lake Front Park, in the business district, appropriating half a mile of Lake Michigan, and by four-

teen small parks and two more larger ones in other portions of this district, with the aid of a \$4,000,000 bond issue. While a special park commission has been energetic in pressing Chicago's chief need—that of small parks and playgrounds—the Cook County authorities have now taken action looking toward the securing of a rural park system comparable to that of the Boston Metropolitan district and Essex County, New Jersey.

V. PRESERVATION OF NATURE

The work of the Essex County Park Commission which has just been mentioned suggests admirable methods which may and ought to be followed by all other communities. In Newark, Orange and other towns in Essex County, the commission is taking low-lying ground, valueless for building purposes, and by proper draining, is making it into entirely suitable parks. Thus, the least expensive land is made into parks in the neediest sections of the cities. In the protection of rural regions, the greatest accomplishment of the year is the establishment of the forest reserves in Minnesota, 250,000 acres being included in the tract on which five per cent of the timber must be left for reseed-ing. This is the result of national legislation secured by the Minnesota Federation of Women's Clubs. The federal government by recent additions now controls sixty-two million acres of forest land.

VII. PUBLIC NUISANCES

The most vigorous work of the year has been done in the effort to diminish smoke. While Mr. Benjamin failed in Cleveland by the device of persuasion, more vigorous methods have been partially successful in St. Paul, Chicago and New York. The Commercial Club of Chicago in a body visited the State University at Champaign, to see a demonstration of successful smoke prevention.

VIII. PUBLIC RECREATION

From all parts of the country comes the news of the extension of playgrounds, Louisville and St. Louis recording eight spaces so used last summer. Chicago's municipal playgrounds have reached the number of eight, exclusive of special provisions in the parks and the playgrounds maintained by settlements and other philanthropic organizations. The most significant event of the year perhaps was the completion of Seward Park in New York, through a special fund secured by Mayor Low. This settles the dispute which has raged for years, as to whether the children should have a portion of this clearance for play, or whether, according to the New York Park Commissioners, it should be entirely devoted to grass. A valuable addition to the equipment of all friends of public recreation has come in the form of Joseph Lee's little book, "Constructive and Preventive Philanthropy," in which playgrounds and public baths receive special

exposition. The public bath facilities of the country have been increased by the addition of several baths in minor New York cities which have availed themselves of the progressive legislation of that state, and by the five baths provided through the munificence of Mr. Walters in Baltimore, while St. Louis has in prospect five public baths as the result of a municipal appropriation. Milwaukee by the addition of another free natatorium still leads the country in all-the-year free swimming baths.

VIII. RURAL IMPROVEMENT

Notable advances have been made in the extension of traveling libraries and free postal delivery during the year. Professor Bailey has been put in charge of the Agricultural College at Cornell, which insures, if no more, the training of a special class of young men for work in landscape architecture and kindred subjects. Senator Stout's Training School for Rural Teachers at Menomonie, Wisconsin, is in process of realization.

IX. SCHOOL EXTENSION

The New York free lectures continue to be the most spectacular form of public instruction for adults in the world, the auditors of Greater New York this last winter reaching the unparalleled number of 1,204,000, at over four thousand free lectures. That system of popular instruction was improved this year by the addition of lectures in foreign languages to recent arrivals from Europe, and Sunday concerts on the roof gardens of the school buildings. At the centennial celebration in New York the free lecture system was called into requisition to provide a stereopticon lecture on history in every section of the city—a plan followed at the centennial celebration in Chicago in September, 1903. Milwaukee has inaugurated a system of free lectures, appropriating \$1,000 the first year for lectures under the auspices of the school board, a sum which was increased to \$3,000 last year. Great advances have been made in school gardens, in Boston, Minneapolis, Milwaukee, Louisville, Chicago, and elsewhere. Boston has also extended the system of lunches in the high schools, so that less reliance need be placed upon the hygienic products of the confectioner. Vacation schools flourished in most of the large cities in greater numbers than ever last summer. At Menomonie, Wisconsin, Senator Stout's latest gift, a beautiful gymnasium and bathhouse, has added wonderfully to the equipment of the school system of that charming little city, placing it far to the front of other American cities. Chicago has opened an elaborately equipped parental school, and with the aid of legislation at Springfield, the school board now has further powers of compulsory education by being authorized to issue the certificates of employment to children between the ages of fourteen and sixteen working in factories and stores. The licensing of newsboys in New York

has also been placed in the hands of the school authorities, to the great discouragement of truancy. The teachers' federations of Buffalo and Chicago have achieved distinction during the year and have advanced the cause of democratic education. In Buffalo this organization secured a teachers' annuity system, while they continue to do their most successful work in their delightful club house, where social intercourse gives the key-note to the extramural life of the teacher. The schools have become allies of civic improvement, in the increasing attention given to the beautification of buildings and grounds, especially in the extension of the organization of Junior Civic Leagues, notably under the guidance of Professor W. J. Stevens at St. Louis.

X. SOCIAL SETTLEMENTS

The settlement movement continues to flourish from the Atlantic to the Pacific, and the Lakes to the Gulf. Perhaps the most significant event of the last year was the negative result achieved in Mr. Robert Hunter's dispute with certain members of the governing board of the New York University settlement, in which one question at issue was that of democratic government from within or aristocratic government from without. The most efficient settlements of the country are those managed by residents on the ground and in touch with the constituency. The Greek play produced in Chicago and New York by native Greeks under the direction of settlement workers indicates the artistic possibilities of settlements among immigrants.

XI. VILLAGE IMPROVEMENT

The fame of Zion City, one of Chicago's newest suburbs, has been spread by methods so familiar that the actual accomplishments in the direction of village improvement may have been overlooked.

LODGINGS FOR WOMEN AT THE ST. LOUIS EXPOSITION

The Wednesday Club coöperating with the Humanity Club wishes to give publicity to the following facts:

In order to give a measure of protection to women and girls coming to St. Louis during the time of the World's Fair, the following organizations have agreed either to provide lodging houses for women or to guarantee the respectability of certain lodgings which they will investigate, and a list of which they will have on hand at a definite address. The ministers, priests and pastors of the churches with which these organizations are affili-

The most careful attention was given to the question of municipal improvements, such as water supply, sewage disposal, lighting, paving, street cleaning, the width of streets, disposition of parks, and the general appearance of the city, the American League being invited to advise regarding some of these questions.

The League had the privilege of conducting and subsidizing the last conference of Cook County Improvements Associations in October, 1902, at the Art Institute in Chicago, in which representatives of many of the three hundred and forty improvement associations in Cook County were present. As a result of this meeting, steps were taken to secure a federation of Cook County improvement societies, which has finally matured. The greatest distinction of the year in this direction was probably that of assisting in the organization of a Canadian League for Civic Improvement at Toronto, in which the field secretary was active and efficient.

The literature of Civic Improvement includes vigorous and instructive articles in the *Outlook* by President McFarland, a complete number of THE CHAUTAUQUAN Magazine, the Civics Number, issued in August, a series of articles on "The Civic Renaissance" in the same magazine, the plans for providing, through *The Ladies' Home Journal*, a page of news every month under the editorship of President McFarland, and the expansion of the field of *The Craftsman* to include civic improvement. The success of Civic Week at Chautauqua last summer has led to the provision of a similar series of addresses and conferences this summer at Chautauqua and St. Louis. The influence of these occasions will be widened by the coöperation of the National Municipal League and the American Park and Outdoor Art Association.

ated will send to the various headquarters addresses of such of their parishioners as will take lodgers. In this way lodgings, in all parts of the city, of unimpeachable character and of moderate or low price will be made available. These organizations are: The Travelers' Aid, Women's Christian Ass'n, 1814 Washington Avenue; The Queen's Daughters, 111 North 16th Street; The King's Daughters, Rest Room, World's Fair Grounds; The Salvation Army, S. E. cor. 8th and Walnut Streets; The Ev. Lutheran City Mission Society, 1704 Market Street.

Civic Study Programs

LIBRARIES

A program suggested for nine sessions of study.

PREPARED BY JOHN THOMSON

Chairman Section on Libraries American League for Civic Improvement, and Librarian of the Free Library of Philadelphia.

SESSION I. SUBJECT: LIBRARIES OF BYGONE DAYS

Topics—(a) Libraries of Clay (Assyrian and Babylonian); (b) Alexandria; Athens (of Pisis-tratus), Ulpian (of Trajan), collections of Sulla, Paulus, Lucullus, etc.; (c) Monastic libraries—St. Augustin, Canterbury, St. Gall, Clugni, etc.; (d) Private libraries like that of Richard de Bury.

Suggested Reading—Clark, John Willis, *Care of books*.—Libraries and their fittings from earliest times to the end of the eighteenth century; Clark, John Willis, *Libraries in the Mediaeval and Renaissance Periods*; *Encyclopædia Britannica*, ninth edition (vol. XIV; pp. 509-515); Merryweather, F. Somner, *Bibliomania in the Middle Ages*; Putnam, George Haven, *Books and Their Makers During the Middle Ages* (vol. I; pp. 1-170).

SESSION II. SUBJECT: LIBRARIES OF TODAY

Topics—(a) The Vatican; (b) The Bodleian and British Museum; (c) Paris, Berlin, Vienna, Dresden, Washington, St. Petersburg, etc.

Suggested Reading—*Encyclopædia Britannica*, ninth edition (vol. XIV; pp. 515-536); Fletcher, William Isaac, *Public Libraries in America*, (pp. 93-114); Greenwood, Thomas, *Public Libraries*; Ogle, John I., *Free Library* (pp. 117-299); Wilson, James Grant, *World's Largest Libraries*.

SESSION III. SUBJECT: THE LIBRARY MOVEMENT

Topics—(a) Sketch of the movement, changing libraries from "collections guarded from the public" to the "Universities of the People" (in passing, "Ewart Bill" 1850, and "Mudie's Circulating Library"); (b) Distinctive functions of libraries today—National, State, City, University, Town and Special; (c) Library schools and institutes.

Suggested Reading—Fletcher, William Isaac, *Public Libraries in America* (pp. 1-31); Greenwood, Thomas, *Public Libraries* (pp. 1-67); Ogle, John J., *Free Library* (pp. 1-103); United States Report of the Commissioner of Education, 1892-93, (vol. I; pp. 691-1014); Wynter, Andrew, *Subtle Brains and Lissom Fingers* (133-139).

NOTE—For information in reference to library schools and institutes, refer especially to *The Library Journal* (vols. I-XXVIII, 1876-1903) and *Public Libraries* (vol. I, 1886-1903) both of which are fully indexed.

SESSION IV. SUBJECT: TOWN OR VILLAGE LIBRARY

Topics—(a) Its value as an investment to a town—in attracting new residents and in raising the average of intelligence; (b) In supplementing the work of schools, historical societies, natural history clubs, literary societies and other organizations; (c) As the natural place for lectures and educational exhibits; (d) As the natural place for the collection of matter pertaining to local history.

Suggested Reading—Bain, James, Jr., *Museums, Art Galleries and Lectures in Connection with Public Libraries*; (in United States Report of the Commissioner of Education, 1892-93, vol. I; pp.

850-861); Fletcher, William Isaac, *Public Libraries in America* (pp. 31-39); Lowell, James Russell, *Books and Libraries* (in his "Literary and Political Addresses"); Lubbock, Sir John, "On Libraries" (in his "Uses of Life"); United States Bureau of Education, *Catalogue of the A. L. A. library*, 5,000 volumes for a popular library.

SESSION V. SUBJECT: LIBRARY ADMINISTRATION

Topics—(a) Building and locality; (b) Personnel of Librarian and Assistants; (c) Board of Trustees, their relations to the Librarian, and their division into Sub-Committees; (d) Hours of opening, open shelves *vs.* closed, reference work, etc.

Suggested Reading—Burgoyne, Frank J., *Library Construction*; Dana, John Cotton, *Library Primer*; Fletcher, William Isaac, *Free Libraries in America*; Greenwood, Thomas, *Public Libraries* (pp. 352-419); Macfarlane, John, *Library Administration*; United States Report of the Commissioner of Education, 1892-93, (vol. I; pp. 691-1014); J. G. Rosengarten, *American Libraries from a Trustee's Point of View* (A. L. A. Proceedings, 1902, pp. 208-211).

SESSION VI. SUBJECT: TRAVELING LIBRARIES

Topics—(a) History of the movement and present status in the leading states, such as Pennsylvania, New York, Wisconsin, etc.; (b) Their ethical value in the uplifting of the masses, in producing a higher grade of citizenship, and in decreasing viciousness and crime.

Suggested Reading—New York, University of the State of: Home Education Department, *Bulletin No. 40, Traveling Libraries* (1901); Pennsylvania, Free Library Commission of: First report (1899-1902); Wisconsin, Free Library Commission of: First, second and third biennial reports (1895-6) (1897-8) (1899-1900); Wisconsin, Free Library Commission of: *Free Traveling Libraries in Wisconsin* (1897).

SESSION VII. SUBJECT: LIBRARY AND CHILDREN

Topics—(a) Assistance of libraries to children in their school and by coöperation with the schools; (b) Inspiring interest in various matters by means of picture bulletins; (c) Lectures—talks—story hours.

Suggested Reading—Dana, John Cotton, *Library Primer* (pp. 157-162).

Library Journal, April, 1903 (vol. XXVIII, No. 4), School Number.

NOTE—For papers and information bearing on this department of library work refer especially to *The Library Journal* (vols. I-XXVIII, 1876-1893) and *Public Libraries* (vols. I-VIII, 1886-1903) both of which are fully indexed.

SESSION VIII. SUBJECT: SPECIAL LIBRARIES

Topics—(a) The University Library (Harvard); (b) Hospital and medical libraries (Washington); (c) Special collections on Music, Art, Incunabula, etc.; (d) For the blind.

Suggested Reading—Fletcher, William Isaac, *Public Libraries in America* (pp. 104-110); Hill, George Birkbeck, *Harvard College* (pp. 285-296); Putnam, Herbert, *Library of Congress* (in *Atlantic Monthly*, vol. LXXXV; pp. 143-158); Rutherford, John William Moon and his *Work for the Blind*; Spofford, Ainsworth Rand, *The Library of the United States* (in *Forum*, vol. XIV; pp. 369-380).

SESSION IX. SUBJECT: LIBRARY WORKERS

Topics—(a) Melvil Dewey and Charles A. Cutter and their classifications; (b) William Ewart, Sir. John Lubbock, Edward Edwards and Andrew Carnegie; (c) Sir Anthony Panizzi, Richard Garnett, Herbert Putnam and others.

Suggested Reading—*Dictionary of National Biography* (Edward Edwards, vol. XVII; pp. 114-115). (William Ewart, XVIII; pp. 91-92.) (Sir Anthony Panizzi, vol. XLIII; pp. 179-183); Fagan, Louis, *Life of Sir Anthony Panizzi*; Lanier, Henry Wysham, *Many sided Andrew Carnegie* (in *World's Work*, vol. I; pp. 618-630); *Library, the*, Melvil Dewey (n. s., vol. II; pp. 337-340); *Library, the*, Richard Garnett (n. s., vol. I, p. 1); *National Magazine*, Herbert Putnam (vol. X; pp. 200-201); Ogle, John J., *Free Library* (pp. 104-114).

NOTE—*The Library Journal* (vol. XXVIII, 1896, 1903)

and *Public Libraries* (vols. I-VIII, 1886-1903) are devoted entirely to library topics and may be consulted with much benefit on all matters in relation to libraries and library work. Both are fully indexed.

SUPPLEMENTARY SUGGESTED READING

Azarias, Brother, *Books and Reading*; Burt, Mary Elizabeth, *Literary Landmarks*; Carlyle, Thomas, *On the Choice of Books*; Harrison, Frederick, *Choice of Books*; Hazlitt, William, *Reading of Old Books* (In his "Plain Speaker"); Knowles, Frederick Lawrence, *Practical Hints for Young Writers, Readers and Buyers*; Koopman, Harry Lyman, *Mastery of Books*; Larned, Josephus Nelson, *Talk about Books*; Lubbock, Sir John, *On Reading* (in his "Uses of Life"); Matthews, William, *Professorship of Books* (in his "Hours with Men, Women and Books"); Maurice, John Frederick Denison, *Friendship of Books*; Porter, Noah, *Books and Reading*; Pryde, David, *Highways of Literature*; Ruskin, John, *Sesame and Lilies*; Shaylor, Joseph, *comp.*, *Pleasures of Literature*; Stephens, Henry Morse, and others; *Counsel upon the Reading of Books*; Spofford, Ainsworth Rand, *Book For All Readers*; Thayer, Joseph Henry, *Books and Their Use*; Thwing, Charles Franklin, *Reading of Books*; Wheatley, Henry Benjamin, *How to Form a Library*; Whiting, Lillian, *World Beautiful in Books*.

THE PARK PROBLEM

A program suggested for nine sessions of study.

PREPARED BY G. A. PARKER

Chairman of the Section on Parks, American League for Civic Improvement, and Superintendent of the Keney Park, Hartford Connecticut.

SESSION I

The preliminary work in creating enthusiasm or interest in parks. Meetings and temporary associations. Actions of Board of Trade, and similar unofficial associations, of which the Merchants' Association of San Francisco is a type. The San Diego method, largely the result of individual efforts. "Let us Make a Beautiful City of Springfield, Mass.," a pamphlet issued by the *Springfield Republican* is of great value. Methods of New York City, Philadelphia, and Providence park associations, people voluntarily associated together to forward the park interests throughout the city or special parks and features.

SESSION II

The formation of park commissions. The number of commissioners. Term of office. Method of election or appointment. Bureau under department of public work. Superintendent under city council. Superintendent under mayor. Public park charter of New York City. Charters of second, third, fourth class cities of New York. Charters under New Municipal Code of Ohio. Special charters of Minneapolis, Detroit, Boston, Massachusetts Metropolitan Park System, Essex County Park System, Hartford, New Haven, Springfield, Ill., Park and Pleasure Drive Districts.

SESSION III

Relation of parks to other city functions, to population and to area of city. Why and where parks and squares should be located. Methods of obtaining lands. Purchase. Condemnation of gifts.

SESSION IV

Designs of a park system for the whole city or for several cities united into a park district. Design of each separate park or square. "What is wanted most of all is a plan." Preliminary work and surveys necessary to form a plan. Method of constructing a design. Method of applying designs to the grounds. Alteration of plans. Cost of plans, etc.

SESSION V

Organization of the working forces. Superintendent, Engineer, Forester. Foremen of Construction. Foremen of Maintenance. Foremen of Crews. Workmen. Methods of construction and maintenance. Accounts.

SESSION VI

Grades and lines. Description of grades and how different grades are harmonized together. Description of lines, their meanings, relations and harmonies. Methods of performing grading.

SESSION VII

Plantings. The principles underlying all plantings; as where to plant, what to plant, and how to plant. Caring for plantings; recording plantings.

SESSION VIII

Maintenance. Maintenance of roads, paths and gravel spaces. Maintenance of grass and low growing plants. Maintenance of shrubs and trees. Maintenance of buildings and structures. Rules and regulations governing the use of the park. Policing and lighting.

SESSION IX

Special features. Music and band stands. Playgrounds, picnic grounds, statuary, wading pools, bath-houses, pavilions, skating, boating, etc.

PARK AND OUTDOOR ART

A program suggested for nine sessions of study.

PREPARED BY G. A. PARKER

Chairman of the Section on Parks, American League for Civic Improvement, and Superintendent of the Keney Park, Hartford Connecticut.

SESSION I

Proportion and relation of the elements of beauty fundamental to all art, whether sculpture, painting, music, literature, architecture or landscape gardening. For the present purpose it is well told in Chapter VIII of "The Principles of Architectural Composition," by John Beverly Robinson.

SESSION II

The elements of a landscape picture, such as color, harmony, light, shade, perspective, atmosphere, values, texture, form, composition, etc. Use John C. Van Dyke's book "How to Judge of a Picture." Here the subjects are treated so clearly as to be easily applied to outdoor art.

SESSION III

The spirit or meaning of natural beauty. Mrs. Mary Anne Schimmelpennick very clearly interprets the natural meaning in the first one hundred pages of her book on the "Principles of Beauty." This book was written nearly a century ago, is out of print and very scarce. A reprint of these one hundred pages in pamphlet form would be valuable. John C. Van Dyke's book "The Meaning of Pictures," should be read for this session.

SESSION IV

The different schools or styles of landscape gardening. This is well discussed in the third, fourth and fifth chapters of F. A. Waugh's book on "Landscape Gardening," and also in J. C. Loudon's introduction to "Repton's Landscape Gardening."

SESSION V

The skeleton of the work. The framework on which it must be built. The base of all this work is the study of the form of the ground into which it has been molded by natural forces, or by grading and the lines drawn upon it, that is, the design. I know of no book which treats satisfactorily of this; probably as good as anything that has been written are the reports of Frederick Law Olmsted to the different park commissioners. A compilation from these reports could be made to cover the subject quite completely.

SESSION VI

Plant life in the composition of a picture. Here, again I know of no book which covers the subject. While there is a wealth of books on plants and plant life, here a compilation from the writings of Frederick Law Olmsted and others could be made to cover this subject quite satisfactorily.

SESSION VII

The treatment of individual parks, squares or plots of ground. A. J. Downing's "Landscape Gardening" undoubtedly treats of the fundamental principles very thoroughly. F. J. Scott's "Suburban Home Grounds" makes specific and practical applications of Downing's principles; and Frederick Law Olmsted's writings are exceedingly valuable.

SESSION VIII

A system of parks and boulevards for a city, or for cities and towns considered as a unit. Here "Charles Eliot, Landscape Architect," written by President Eliot, is without a rival. While Charles Eliot was first a student and then a partner of Mr. Olmsted's, and though his work reflects much of Mr. Olmsted's methods and thoughts, Mr. Eliot has an individuality of his own, and was the gifted man for the solution of this problem; how well he solved it is shown by the Metropolitan Park System of Boston.

SESSION IX

The unity of a city's plan and the different functions of the city's work. "The Improvement of Towns and Cities," by Charles Mulford Robinson, treats very satisfactorily one part of this question, that of "Civic Aesthetics." *Municipal Affairs*, a quarterly published in New York, has several exceedingly valuable articles on this subject, and there are many others in the reports of the different municipal societies.

In these nine divisions I have tried to include the subject of parks and outdoor art as I understand it. It could be subdivided many times, and some of the subdivisions undoubtedly would seem more important and should have precedence over those as given; yet I believe that if one gets hold of these nine divisions there will be less difficulty in working out the details.



Bibliography of Civic Progress

COMPILED BY E. G. ROUTZAHN

The increasing attention given to the varied phases of civic improvement is notably evident in the wealth of book and periodical literature on the subject. The following bibliography is intended to give a general survey of the broad field, with "guide-posts" directing the student and worker to the more significant features of the outlook. Some titles have been included because (1) they are easily accessible, or (2) suggestive of special developments, or (3) the only references of their class. Correspondence regarding these titles may be addressed to the compiler, in care of THE CHAUTAUQUAN, 5711 Kimbark avenue, Chicago. More complete subject lists can be furnished, single session and course program outlines will be prepared to order and valuable reference and illustrative material will be supplied.

BIBLIOGRAPHIES

"Bibliography of Municipal Administrations and City Conditions," Robert C. Brooks (continued up to date in the quarterly issues of *Municipal Affairs*, New York).

A summary and index of legislation, annual (New York State Library).

Review of legislation, annual (New York State Library).

See also Poole's Index, Cumulative Index, Readers' Guide to Periodical Literature, Cumulative Book Index, United States Catalogue, Catalogue of United States Documents, Monthly List of Publications (United States Department of Agriculture), *Charities* ("Magazines of the Week"), THE CHAUTAUQUAN ("Round Table," October, 1902—April, 1903; "Survey of Civic Betterment," May, 1903; *ibid*).

"Partial Bibliography of Civic Progress," E. G. Routzahn, THE CHAUTAUQUAN, August, 1903.

THE CITY AND ITS IMPROVEMENT

"Relative Influence of City and Country Life on Morality, Health, Fecundity, Longevity, and Morality," J. S. Hough (American Academy), "Block Beautiful," Z. Milham, *World's Work*, October, 1903.

"Garden Cities of England," *Charities*, January 31, 1903.

"Municipal Year Book" M. N. Baker, *Engineering News*.

"Washington, Old and New," Charles Zueblin, THE CHAUTAUQUAN, April, 1904.

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"Harrisburg Up to Date," J. Horace McFarland, THE CHAUTAUQUAN, March, 1904.

"Greater New York," Charles Zueblin, THE CHAUTAUQUAN, February, 1904.

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"City of the Future," Charles Zueblin, *Ethical Record*, December, 1900.

"Model Street at St. Louis," THE CHAUTAUQUAN, March, 1904.

"American Cities and Their Problems," D. F. Wilcox (Macmillan).

"City Life, Crime and Poverty," J. R. Commons, THE CHAUTAUQUAN, April, 1904.

ARTS AND CRAFTS

"Chapters in the History of the Arts and Crafts Movement," O. L. Triggs (Industrial Art League).

"Arts and Crafts in Technical Schools," Henry McBride, THE CHAUTAUQUAN, March, 1904.

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"Crafts in Elementary Schools," M. G. Campbell, THE CHAUTAUQUAN, January, 1904.

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"Hints to Small Libraries," M. W. Plummer.

"Papers and Proceedings of Twenty-fifth General Meeting of the American Library Association" (A. L. A.).

"Instructions Concerning Erecting of a Library," G. Nande (Houghton).

"Home Libraries in Chicago," THE CHAUTAUQUAN, February, 1904.

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"Among Green Trees," J. E. Rogers (Mumford).

"Irrigation," F. H. Newell (Crowell).

"Economics of Forestry," B. E. Fernow (Crowell).

"Practical Forestry for Beginners," J. Gifford (Appleton).

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PUBLIC RECREATION (GYMNASIA, PLAYGROUNDS, BATHS, ETC.)

"Municipal Concerts," S. Baxter (*Annals American Academy*, January, 1899).

(Continued on page 404.)



GROUP OF PRUDENTIAL HOME OFFICE BUILDINGS, NEWARK, N. J.

The American Pillar of Hercules

BY HERBERT S. HOUSTON

Photographically illustrated by Arthur Hewitt.

When the Greek scholars carried the new learning into Italy, and on to the Pillars of Hercules, the middle ages had to give way to light. For ideas with life in them have spread light from the stone age until now, in every century where they have been wisely brought. The spread of thrift and saving in America in connection with insurance is a striking illustration in point. A little over a quarter of a century ago a young New Englander introduced from England the idea of insurance for the masses of the people. For a number of years the idea had been growing in Great Britain and it had gained a broad foot-hold at the time it was transplanted in this country. And when brought here it was so fully adjusted to American conditions by the Prudential that it grew from the beginning, like a native. That record of growth is an amazing story of human achievement, but it is the old story—always absorbingly interesting—of the abounding power of an idea with life in it.

Ten years after the close of the Civil War—a period so recent that its history

has scarcely been written—the Prudential was established in Newark. As if fore-knowing the great rock to which it would grow, it began its foundation in a basement office. It was like the beginning of the New York *Herald* by Bennett, the elder, in a basement on Ann street. But it would be an idle play with words to make a basement office the real foundation of the Prudential. It was something much deeper down than that—nothing else than the bed-rock American principle of democracy. The Prudential applied the democratic principle to life insurance. As Senator Dryden, of New Jersey, the founder of the company, has said, "Life insurance is of the most value when most widely distributed. The Prudential and the companies like it are cultivating broadly and soundly among the masses the idea of life insurance protection. To them is being carried the gospel of self-help, protection and a higher life."

And what has been the result of the democratic American principle worked out in life insurance? In 1875 the first policy

was written in the Prudential. At the end of 1903 there were 5,447,307 policies in force on the books of the company, representing nearly a billion dollars. The assets in 1876 were \$2,232, while twenty-seven years later, in 1903, they were more than 30,000 times greater, or \$72,712,435.44, the liabilities at the same time being \$62,578,410.81. This is a record of growth that is without precedent in insurance and that is hard to match in the whole range of industry. The rise of the

Prudential to greatness reads like a romance in big figures, but, in fact, it is a record of business expansion that has been as natural as the growth of an oak. The corn crop of the country seems too big for comprehension until one sees the vast fields of the Middle West, and then it appears as simple as the growth of a single stalk. So with the Prudential. To say that in ten years, the company's income grew from something more than \$9,000,000 a year to more than

\$39,000,000 last year is amazing as a general statement, but when made in relation to the broad principles on which that growth has been based, it becomes as much a matter of course as the corn crop. There is no mystery about it; but there is in it, from the day when the principles were planted in Newark until these great harvest days, the genuine American spirit of achievement, strong, hopeful and expansive.

The Prudential Insurance Company

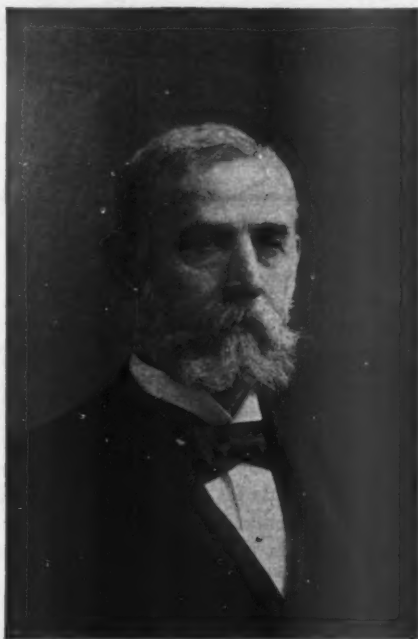
of America is a national institution. It was founded to provide insurance for the American people on the broadest possible basis, consistent with strength and safety.

Just as Grant and Lee organized their armies, or as Kouropatkin and Yamagata plan their campaigns in Asia, so does the Prudential work out its national insurance propaganda. The company's organization is essentially military. It is a wonderful combination of big grasp and outlook with the most painstaking thorough-

ness and system in details. And as is always the case in every organization that throbs throughout with intelligent energy, there is a man at the centre of it. This man has a constructive imagination lighting up a New England brain. To business prudence there is added the large vision which sweeps the horizon for opportunity. Naturally, to such a vision the application of the democratic idea to insurance was an opportunity of the first magnitude. When seen, it was

grasped and devel-

oped. The Prudential was founded. In the most careful way, its idea was tested, just as the Secretary of Agriculture tests seeds at the Government's experiment farms. Here was where prudence kept the large vision in proper focus. Gradually the idea took root and grew. Year after year the Prudential added to its number of policy holders. And all the time the company was working out a more liberal basis for its democratic idea. But each time a more liberal policy was



U. S. SENATOR JOHN F. DRYDEN, PRESIDENT OF THE PRUDENTIAL

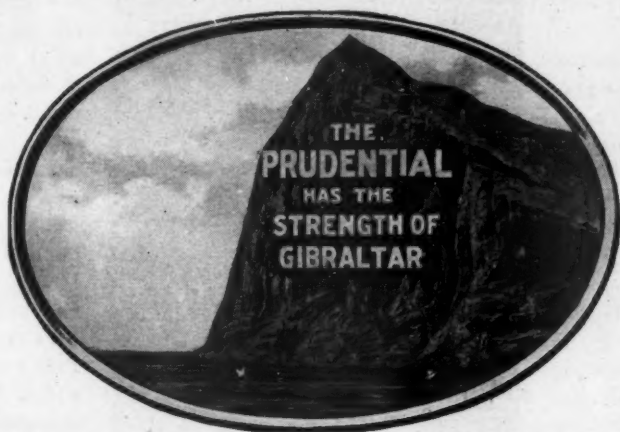
offered, it was fully tested. "Progress with strength" is the way President Dryden describes the company's principle of growth—the results, clearly, of vision and prudence. At the end of ten years of this method of growth, the company reached the point where, it was believed, insurance could be safely offered for any amount with premiums payable on any plan, either in weekly installments or at longer periods. Within the five years 1886 to 1890 inclusive, the company's assets increased nearly five-fold, from \$1,040,816 to \$5,084,895 and the amount of insurance in force from \$40,266,445 to \$139,163,654.

The Prudential had found itself. The idea of democratic insurance had been

homes. As the insurance idea was carried broadcast in this wide publicity, it was followed up by the well-drilled army of Prudential agents.

Again it was vision and prudence and again the result was "progress with strength." The Prudential grew into a place of foremost importance, known in every part of the world. The printed announcement—always attractive and suggestive—had never gone ahead of men bearing the insurance message until sent by the Prudential, and this conjunction marked the epoch in business in which advertising and personal endeavor should be used as complimentary forces.

The Prudential publicity is accompanied



fully tested and adjusted to the needs and conditions of the American people. Then, with a boldness which only large vision could have quickened, the plan was formed to make the Prudential's idea known in every section of the country. Gibraltar was chosen as the symbol of the company's strength, and advertising—the telling of the Prudential idea to the people—was begun. At that time insurance advertising was a sea as unknown as the Atlantic when Columbus set sail from Palos. But, with a map of the United States for chart and a live idea for compass, the Prudential took passage in nearly every important magazine in the country, and thus, safely made port in millions of

by wise promotion from a field force of over 12,000, some of whom have been with the company for over a quarter century, working in every State of the Union. They have the zeal of Crusaders and it is kept at ardent pitch through an organization that could not fail to produce a wonderful esprit de corps. Wise direction and constant encouragement come from the home office, and then the company's agents are grouped in districts, under superintendents and assistant superintendents, managers, general agents and special agents, and in each district a strong spirit of emulation is developed by human contact and co-operation. Weekly meetings are held, and the problems of wisely presenting insurance are dis-

cussed. Comparative records of the men are kept in many districts, and prizes are offered for those writing the largest volume of business, for those making the greatest individual increase, and for many other contests. This wholesome rivalry produces an alertness and industry which are to the company an invaluable asset in human efficiency. A few weeks after this magazine appears, probably 2,000 agents of the Prudential—those who have made the best records for the year—will be brought to Newark from all parts of the country. They will, of course, visit the home offices and come in contact with the directing centre of their wonderful organization.

And after all, there is no place where one feels the greatness of the Prudential quite so much as in the vast granite piles which have been raised for the company's home buildings. They rise above the Jersey meadows as Gibraltar does above the sea, a convincing witness, surely, to the growth and to the strength of the Prudential. But they are not a cold, gray rock, but a living organism throbbing from vital contact with millions of policy holders. There are now four of these great buildings, all occupied by the company.

Today the Prudential is paying over 300 claims a day, or about forty each working hour. On many policies settlement is made within a few hours by the superintendent of the district; on the large policies a report is sent immediately to the home office and settlement authorized by tele-

graph. And on over 45 per cent of claims more money is paid than the policy calls for. From the beginning the Prudential has followed lines of great liberality, whether in dealing with the family where the policy is kept in the bureau drawer, or with the estate of the millionaire.

It would be interesting to describe the broad activities that hum in the great buildings at Newark, but they would more than require an entire article themselves. So, too, with the equipment and furnishings of the buildings which, in the way of complete adjustment to their particular work, are probably unequaled in the world.



ENTRANCE TO MAIN OFFICES

For example, in the actuarial department is a card machine, invented by an actuary of the company, which can do all but think. But many of these things, in miniature, will be seen by the thousands who go to the World's Fair at St. Louis. They will find in the Prudential's exhibit in the Palace of Education a fine model of all the buildings, and also the fullest data concerning life

insurance that have ever been brought together.

But the last word about the Prudential is not told at any Exposition. It is found in the 5,500,000 and more of policies which form a stupendous exhibit on the value of life insurance in developing thrift, safe investment, and home protection in a nation. Of course such an exhibit could never have been possible if the Prudential had not worked out safe policies that would meet the broad needs of the American people.

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(Continued from page 398.)

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ANSWERS TO SEARCH QUESTIONS ON JUNE READINGS

RACIAL COMPOSITION

1. Teachers, preachers, physicians, lawyers, government service, business, farmers, artisans and clerks.
2. Fifty per cent.
3. Ninety per cent.
4. From 83.5 per cent to 47.4 per cent.
5. The native born children of native parents show 5.9 per cent of illiteracy. The native born of foreign parents 2 per cent.

READING JOURNEY

1. The island of that name, the Isle of Pines lying directly south of it, and more than a thousand islets and reefs scattered along its coasts.
2. They are of little use, not being navigable for any great distance.
3. The mean annual temperature is 77 degrees. The range of temperature between the mean of the hottest month and that of the coldest is 82 degrees to 71 degrees. The highest temperature on record in Havana is 100.60. The nights in both summer and winter are cool.
4. England opened Havana to the trade of the world, up to that time restricted to Seville and Cadiz.
5. Thousands of French and Spanish settlers from Haiti emigrated to Cuba and added to its prosperity.